

# Data Evaluation Report, 2019 Residential Soil Sampling, Old American Zinc Plant Superfund Site, Fairmont City, St. Clair County and Madison County, Illinois

Work Assignment No. 224-RDRD-B5A1, Contract No. EP-S5-06-01

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The remedial design (RD) soil sampling for the Old American Zinc Plant Superfund Site (site) was performed to collect data at surrounding residential, commercial/industrial, and vacant properties associated with the site and to evaluate the nature and extent of the contaminants of concern (COCs) in the surrounding property areas. The COCs are arsenic, cadmium, zinc, and lead. The sampling results will be used to support the RD for the surrounding properties. Previous sampling events include the time-critical removal action (TCRA) sampling, remedial investigation (RI) sampling, and remedial design sampling events in 2017 and 2018. These previous events also supported RDs for the surrounding properties and the onsite facility area consolidation area. Sampling was conducted in accordance with the site-specific plans (SSP), which include the quality assurance project plan (QAPP), the field sampling plan, the health and safety plan and the QAPP addendum (CH2M 2017a, 2017b, 2018a, and 2019a) at residential (vacant and occupied) properties. Additionally, guidance from the *Cultural Resources Monitoring for the Old American Zinc Plant Superfund Site Remediation Activities* (CH2M 2019b) was also followed in the field.

This report presents the results of soil sampling conducted for the COCs at 44 properties. Data tables at the end of this document present the data for each property sampled and a summary of COC exceedances. Attachment 1 contains the data quality evaluation report, Attachment 2 provides a photo log, and Attachment 3 contains field logbook pages from sampling.

This report is composed of the following five sections:

1. Introduction (site description and history, and purpose of sampling)
2. Data Acquisition (field activities conducted during the sampling event)
3. Sampling Results
4. Conclusions
5. References

## 1. Introduction

### Site Description

The site is located in the Village of Fairmont City in St. Clair County and Madison County, Illinois (Figure 1). The site includes a 132-acre Facility Area (FA) and surrounding properties, where elevated metals concentrations associated with the facility operation were found in different media. The FA is bordered by several commercial and industrial properties, including Garcia Trucking to the west, CSX Intermodal railroad yard to the south, and General Chemicals to the east. Most of the residential properties lie to the west of the FA, with smaller pockets of residential or trailer-park developments to the south, east, and north of the FA.

Zinc-smelting operations were conducted at the site from 1916 to 1967. Slag from the smelting operation was cooled by placing the molten material along the northern and western boundaries of the FA. Slag from the site was transported offsite and used as fill material in residential yards and alleyways. The slag stockpiles originally encompassed an area of 15 acres. The site, including the clinker and other smelting residues on the property, was purchased in 1979 by XTRA Intermodal, Inc. (XTRA). XTRA operated a trucking terminal at the site that involved the leasing, storage, and maintenance of a diverse fleet of trailers until 2003. XTRA ground up and redistributed the slag stockpiles on the FA to build up and level the former plant site to facilitate its trucking operation. At present, redistributed slag on the FA covers an area of 125 acres, with thicknesses ranging from 6 inches to 9 feet (ENTACT 2012).

## Site History

Site investigations conducted at the site since 1994 detail the nature and extent of contamination in the FA and surrounding properties. ENTACT completed the RI (ENTACT 2009) and feasibility study (FS) (ENTACT 2012) for the FA in 2012 and identified contaminants in different media that included slag stockpiles, ground slag that was used as fill material at surrounding properties, and high metals concentrations in shallow groundwater.

The surrounding areas impacted by the plant operations include residential, commercial, and vacant properties, village alleyways, and drainageways. Ground slag was transported to surrounding properties by local businesses, residents, and the village for use as fill material in residential yards and surfacing alleyways (ENTACT 2012). Most of the impacted properties are located to the west of the FA, with small pockets of impacted properties located in trailer parks and residential developments to the north, south, and east.

The potentially responsible party (PRP), under the provisions of the Comprehensive Environmental Response, Compensation, and Liability Act, conducted a TCRA from 2002 to 2003. A total of 462 surrounding properties was sampled, of which 209 properties were found to have lead concentrations exceeding the TCRA Removal Action level of 400 milligrams per kilogram (mg/kg) for residential properties and 1,000 mg/kg for commercial properties. No removal action was performed for vacant properties, unless lead exceeded 1,200 mg/kg. Impacted soil was removed from 152 properties, with the remaining properties to be addressed under a remedial action that began in 2018. An additional 25 properties and 8 alleyways were sampled as part of RI.

Following the completion of the RI/FS in 2012, a Record of Decision (ROD) (EPA 2012) was issued by EPA detailing the selected remedial approach for the site. EPA entered into an Administrative Order on Consent with the PRP in August 2014 to perform the RD work. As part of the RD, an additional 14 residential properties were sampled during the predesign investigation (ARCADIS 2016a), and a draft final RD report (consisting of the report and selected drawings, but no technical specifications) (ARCADIS 2016b) was submitted to EPA. In April 2016, the entity responsible for the PRP's work filed for Chapter 11 bankruptcy and ceased performing additional work at the site. As a result, EPA took control of the site and tasked CH2M to complete the RD activities for the FA and surrounding properties.

## Previous Remedial Design Sampling

CH2M collected remedial design soil samples from residential (occupied and vacant) and commercial properties and alleyways in 2017 and 2018. Composite samples from properties were screened against the cleanup levels (CLs) specified in the ROD (residential CLs are 32 mg/kg for arsenic, 37 mg/kg for cadmium, 400 mg/kg for lead, and 6,400 mg/kg for zinc). Composite samples from alleyways were screened against the nonresidential CLs specified in the ROD (239 mg/kg for arsenic, 809 mg/kg for cadmium, 826 mg/kg for lead, and 306,600 mg/kg for zinc).

- A total of 207 properties and 26 alleyways was sampled in 2017 (Shifts 1 and 2). Nineteen properties that were previously sampled but required additional information based on EPA's evaluation were resampled during this round of sampling. Ultimately, 65 properties were identified with COC exceedances greater than the CL. Among these 65 properties, 32 residential properties and 8 alleyways were designed for cleanup. Additionally, 35 properties sampled during the TCRA and RI and one alleyway were included in the design. The remaining properties were designated by EPA for expedited cleanup and were not sketched or designed. Design drawings were included in the Final Basis of Design Report (and Revision 1) based on CH2M's 2017 investigation and historical data (CH2M 2018b and 2018c).
- A total of 222 properties was sampled in 2018 (Shifts 3, 4, 5, and 6). One property that had been previously sampled in 2017 was combined with two other parcels and resampled in 2018. Nine properties that had been previously sampled by ENACT but required additional information based on EPA's evaluation were resampled during this round of sampling. Ultimately, 77 properties were identified with COC exceedances greater than the residential CL. Among these 77 properties, 66 residential properties were designed for cleanup. Additionally, 23 properties sampled during the TCRA and RI were included in the design. The remaining properties were designated by EPA for expedited cleanup and were not sketched nor designed. Design drawings were included in Addendum 1 of the Final Basis of Design Report based on CH2M's 2018 investigation and historical data (CH2M 2019c).

## Purpose

The purpose of the 2019 RD soil sampling event was to identify which properties require remediation of elevated concentrations of COCs in the top 24 inches of surface soil. Sample results were used to evaluate the maximum depth of COC exceedance based on the exceedance criteria defined by the ROD (EPA 2012). Table 1-1 includes the CLs for soil based on human health risk.

Sketches will be drawn for each yard area where concentrations of arsenic, cadmium, lead, or zinc in the composite sample exceed the applicable CL specified in the ROD. Contaminated soil from the identified residential or vacant properties at concentrations exceeding the CL will be excavated to the maximum depth of contamination and placed in the consolidation area.

## 2. Data Acquisition

The 2019 RD sampling effort consisted of obtaining property access, RD soil sampling (Shift 7), and property sketching.

### Property Access

The parcel databases for surrounding properties associated with the site were obtained from the St. Clair County and Madison County geographical information system offices. Multiple parcels in the database with the same street address and property owner information were identified and combined into one property. In addition, each property was divided into multiple yard areas for sampling purposes based on the total area of the property as described in the soil sampling section below.

Access agreements were mailed in February of 2019 to the owners of 60 properties who had not responded to previous mailings, as well as to the owners of 34 properties who had previously denied access. In March of 2019, an access agreement was mailed to the St. Clair County Trustee, requesting access to sample all properties owned by St. Clair County. The last 2019 mailing occurred in July; access agreements were sent to unresponsive property owners of 60 properties. The mailing lists targeted occupied residential properties, although some vacant residential properties were also included. A unique identification (ID) number was given to each property prior to mailing to track properties

without unique addresses. The unique IDs range from 0001 through 1054. They are also used as sampling IDs during the remedial design soil sampling events.

Door knocking was completed to ask owners in person whether they would allow access to their properties for sampling. This activity is summarized as follows:

- Washington Park comprises an area south of the FA with many vacant properties and overgrown lots. Washington Park area properties were reviewed in the field to determine occupancy April 26, 2019.
- Door knocking was conducted on May 29, 2019, to obtain access agreements from residents. Two signed access agreements were received, declining access to one property (1 parcel) and granting access to one property (6 parcels).
- Door knocking was conducted on July 16, 2019, to obtain access agreements from residents. No signed access agreements were received.
- Door knocking was completed August 28, 2019, to obtain access agreements from residents. Three signed access agreements were obtained, granting access to three properties (3 parcels).

Access agreements for 46 properties (61 parcels) were returned from property owners between November 2018 (after Shift 7) and October 2019 (before Shift 8). Access was granted for 32 properties (42 parcels) and denied for 14 properties (19 parcels). Additionally, four properties (4 parcels) were granted access for sampling by St. Clair County Trustee for 2019.

The following properties with access granted were on the sampling list; however, were ultimately not sampled in 2019 due to the following reasons:

- 2300 N 61ST ST (02-10.0-110-054) was not sampled due to significant overgrowth in both the front and back yard areas, the fact that the house on the property was burnt down, and the large amounts of rubble from the fire scattered about the property. The house appeared uninhabitable.
- 2520 N 36th Street (02-08.0-207-040) was not sampled due to the owner refusing access in the field. The property's access agreement was signed in the field in April 2018, but the owner verbally declined sampling in October 2018. CH2M received a signed access agreement in the field that declined sampling during the September 2019 sampling event.

## Soil Sampling

Prior to sampling, public utilities were marked by placing a utility-locate request through JULIE, Illinois' One-Call system. Private utilities within each property were marked by a third-party utility-locate subcontractor, Ground Penetrating Radar Systems, Inc. Utilities were marked using the American Public Works Association Uniform Color Code System. Prior to intrusive work, CH2M also conducted a visual inspection of each property for utilities and, if the homeowner was available, asked them about private utilities on the property.

One sampling shift (Shift 7) was performed in September of 2019. A total of 44 properties (57 parcels) was sampled during this shift. Seven properties (8 parcels) were within the Washington Park area of the site. Soil samples were collected in accordance with the SSP (CH2M 2017a, 2017b, 2017c, 2018a, and 2019a) and analyzed through the EPA Contract Laboratory Program for arsenic, cadmium, lead, and zinc by Method ISM02.4.

## Residential Properties

Soil samples were collected from primarily residential properties. Priority was given to residential-zoned properties with structures and occupants, although some residential vacant properties were sampled as well. The soil sampling consisted of collecting 604 composite samples from 44 properties (57 parcels) (not including quality assurance [QA]/quality control [QC] samples; Tables 2-1 and 3-3).

In accordance with the SSP, the number of yard areas sampled for each property was selected based on the property's total surface area. For properties with a surface area less than 5,000 square feet, one 5-point composite sample was collected from the front yard, and one 5-point composite sample was collected from the back yard. If there was a significant side yard (at least 10 feet of yard), one 5-point composite sample was collected from the side yard. Composite samples (5-point) were collected from the front, middle, and back yards of vacant (no structures) properties with a total surface area less than 5,000 square feet to compensate for the larger surface area due to the absence of a building.

For properties with an area greater than 5,000 square feet, the property was subdivided into four areas of roughly equal surface area, and one 5-point composite sample was collected from each area.

Depending on the configuration of the property, the areas were sectioned into equally sized sections divided parallel to the street extending to the alley and sampled in "slices." Sampling area divisions were developed based on aesthetic purposes of sod replacement in the event that soil remediation is needed. For properties with an area greater than 1 acre, the property's grass or soil surface area was divided into 0.25-acre sections, and one 5-point composite sample was collected from each section. Alternate sampling schemes were reviewed and approved by EPA.

Soil samples were collected using a hand auger from 5 points within a section and in 6-inch intervals up to a depth of 24 inches (0 to 6, 6 to 12, 12 to 18, and 18 to 24 inches). Approximately 4 ounces of soil was collected from each of the 5 points per depth interval and homogenized using stainless-steel spoons in a bucket lined with a disposable liner. Rocks, miscellaneous debris, and vegetation were removed before the composite sample was placed in a jar. A total of four samples was collected per yard area or section (excluding QA/QC samples). The samples were submitted to the laboratory for analysis.

Section 3 presents laboratory analytical results to be used to determine excavation limits if concentrations exceeded a CL.

## Quality Assurance/Quality Control

In accordance with the SSP, QA/QC samples were collected based on the number of samples submitted to the laboratory. Samples were analyzed for total arsenic, cadmium, lead, and zinc per Method ISM02.4, and the QA/QC samples collected during the 2019 sampling shift are summarized in Table 2-1. Field duplicates were collected at a rate of 1 per 10 parent samples. Matrix spike and matrix spike duplicates were collected at a rate of 1 per 20 soil laboratory samples, and 1 equipment blank sample was collected per sampling team per shift. Tables 3-1 (properties less than 5,000 square feet) and 3-2 (properties greater than 5,000 square feet and 1 acre) present sample results, and Attachment 1 contains the data quality evaluation.

## 3. Sampling Results

The following subsections summarize soil sampling results. Soil samples were collected from 44 properties (57 parcels) in 2019. Tables 3-1 (properties less than 5,000 square feet) and 3-2 (properties greater than 5,000 square feet or 1 acre) present total arsenic, cadmium, lead, and zinc analytical data for residential properties, with values exceeding CLs shaded in grey. For samples with field duplicate data, the greater of the parent or duplicate sample is reported. Figure 2 shows the current site status, including all properties sampled in 2017, 2018, and 2019. Figures 3 and 4 show properties with at least one exceedance by COC.

## Total Arsenic

The average arsenic concentration at residential properties sampled in 2019 was found to be 9.27 mg/kg, with a maximum concentration of 27.1 mg/kg. None of the 604 samples exceeded the residential CL of 32 mg/kg.

## Total Cadmium

The average cadmium concentration at residential properties sampled in 2019 was found to be 6.66 mg/kg. A total of 10 out of 604 samples exceeded the residential CL of 37 mg/kg, for an overall exceedance frequency of 1.7 percent by sample and 4.5 percent by property. Forty percent of the exceedances occurred in the depth interval ranging from 0 to 6 inches, 40 percent in the 6- to 12-inch interval, 0 percent in the 12- to 18-inch interval, and 20 percent in the 18- to 24-inch interval. On a per-property basis, 2 out of 44 properties exceeded the cadmium CL (Figure 3).

## Total Lead

The average lead concentration at residential properties sampled in 2019 was found to be 96.16 mg/kg. A total of 18 out of 604 samples exceeded the residential CL of 400 mg/kg, for an overall exceedance frequency of 3 percent by samples and 25 percent by property. Fifty-six percent of the exceedances occurred in the depth interval ranging from 0 to 6 inches, 16 percent in the 6- to 12-inch interval, 16 percent in the 12- to 18-inch interval, and 11 percent in the 18- to 24-inch interval. On a per-property basis, 11 out of 44 properties exceeded the lead CL (Figure 4).

## Total Zinc

The average zinc concentration at residential properties sampled in 2019 was found to be 460.83 mg/kg, with a maximum concentration of 2,920 mg/kg. None of the 604 samples exceeded the residential CL of 6,400 mg/kg.

## Summary of Exceedances

Lead was the most common COC for CL exceedances in samples and properties in 2019 (consistent with the 2018 and 2017 data). In 2017, arsenic and zinc exceedances were the second-most frequent; however, in 2018 and 2019, cadmium exceedances are the second-most frequent.

The maximum concentrations were as follows:

- Arsenic: 27.1 mg/kg
- Cadmium: 72.1 mg/kg
- Lead: 3,650 mg/kg
- Zinc: 2,920 mg/kg

The higher exceedance frequency observed for lead suggests that lead is the primary contaminant of concern in residential soil, which drives the requirement for the residential soil cleanups.

## 4. Conclusions

Figure 2 presents the distribution of properties that were sampled, and Figures 3 and 4 present the properties with COC concentrations exceeding the residential CLs for cadmium and lead.

The laboratory analytical results presented herein for total arsenic, cadmium, lead, and zinc will be used to evaluate whether remediation of the property is needed. The maximum depth of a COC exceedance, the yard area(s) with the exceedance, and the details from the sketches will be used to prepare RD drawings

for each property showing the excavation extents and depth of excavations. Table 4-1 contains a complete list of properties with CL exceedances in 2019. Of the 44 properties sampled during this investigation, 12 properties were identified with COC exceedances greater than the residential CL. All 12 properties with exceedances were sketched in October 2019 and will be included in Addendum 2 of the Final Basis of Design Report, to be submitted in 2020.

## 5. References

- ARCADIS. 2016a. *Predesign Investigation Report, Fairmont City, Old American Zinc Plant Site, Fairmont City, Illinois*. January.
- ARCADIS. 2016b. *Draft Final Design Report, Fairmont City, Old American Zinc Plant Site, Fairmont City, Illinois*. March.
- ENTACT. 2009. *Final Remedial Investigation Report, Old American Zinc Plant Site, Fairmont City, Illinois*. March.
- ENTACT. 2012. *Final Feasibility Study Document for the Old American Zinc Plant Site, Fairmont City, Illinois*. February.
- CH2M HILL, Inc. (CH2M). 2017a. *Quality Assurance Project Plan, Old American Zinc Plant Site, Fairmont City, Illinois*. April.
- CH2M HILL, Inc. (CH2M). 2017b. *Field Sampling Plan, Old American Zinc Plant Site, Fairmont City, Illinois*. April.
- CH2M HILL, Inc. (CH2M). 2018a. *Quality Assurance Project Plan Addendum, Old American Zinc Plant Site, Fairmont City, Illinois*. April.
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- CH2M HILL, Inc. (CH2M). 2018c. *Final Basis of Design Report, Surrounding Properties, Revision 1, Old American Zinc Plant Site, Fairmont City, Illinois*. December.
- CH2M HILL, Inc. (CH2M). 2019a. *Health and Safety Plan, Old American Zinc Plant Site, Fairmont City, Illinois*. February.
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- CH2M HILL, Inc. (CH2M). 2019c. *Final Basis of Design Report, Surrounding Properties, Revision 1, Addendum 1, Old American Zinc Plant Site, Fairmont City, Illinois*. July.
- U.S. Environmental Protection Agency (EPA). 2012. *Record of Decision, Old American Zinc Plant Superfund Site*. September.

# Tables

**Table 1-1. Final Cleanup Levels**

*Old American Zinc Plant Superfund Site*

Contaminant of Concern	Residential (mg/kg)	Nonresidential (mg/kg)
Arsenic	32	239
Cadmium	37	809
Lead	400	826
Zinc	6,400	306,600

mg/kg = milligrams per kilogram

**Table 2-1. Summary of Samples***Old American Zinc Plant Superfund Site*

<b>Analyses</b>	<b>Total Arsenic, Cadmium, Lead, and Zinc</b>
Method	Method ISM02.4 <sup>a</sup>
Number of primary samples	604
Number of field duplicates	61
Number of matrix spike/matrix spike duplicates	31
Number of equipment blanks	1

Note: Includes primary and quality assurance/quality control samples from offsite properties.

<sup>a</sup> Moisture content analysis was completed for samples undergoing total arsenic, cadmium, lead, and zinc analysis.

**Table 3-1. Laboratory Analytical Results for Properties Less than 5,000 Square Feet**  
**Old American Zinc Plant Superfund Site**

Property Address	Property ID	Arsenic (mg/kg)								Cadmium (mg/kg)								Cadmium (mg/kg)							
		Back				Front				Middle				Back				Front				Middle			
		0-6"	6-12"	12-18"	18-24"	0-6"	6-12"	12-18"	18-24"	0-6"	6-12"	12-18"	18-24"	0-6"	6-12"	12-18"	18-24"	0-6"	6-12"	12-18"	18-24"	0-6"	6-12"	12-18"	18-24"
[REDACTED]	0021	15.8	18	9.1	12.8	10.6	11.2	9.1	10.8	--	--	--	--	29.4	21.3	6.4	8.4 J-	17	11.7	0.73	0.76	--	--	--	--
[REDACTED]	0041	--	--	--	--	15.5	11.4	10.8	10	--	--	--	--	--	--	--	--	22.5	3.4	2.7	1.3	--	--	--	--
[REDACTED]	0084	18.8	12.7	11.7	7.6	12.5	13.2	19.5	7.5	--	--	--	--	12.5	0.68	0.86	0.93	7.3	5.3	2.8	1.5	--	--	--	--
[REDACTED]	0565	15.8	12.9	5.7	8.3	8.5	9.5	8.3	8.1	15.4	11.4	10.4	7.8	9.5 J-	4.9 J-	0.76 J-	1.2 J-	3.1 J-	0.84 J-	0.48 J-	1.3 J-	8.3 J-	5.5 J-	5.7 J-	1.3 J-
[REDACTED]	0111	10.3	9	9.9	8.8	7.4	12.7	16.9	8.3	--	--	--	--	4.6	3.7	2.1	1.8	3.5	4.3	8.3	3.9	--	--	--	--
[REDACTED]	1055	8.2	8.7	7.3	6.9	8.3	8.2	6.4	6.2	--	--	--	--	22.8	9.5	5.2	4.4	22.3	2.1	3.3	3.8	--	--	--	--
[REDACTED]	0793	8.4	9.9	8.1	7.3	8.1	8.2	9.1	9.3	--	--	--	--	0.74	1.7	0.5 J	2.7 J-	2.2	0.87	5.6	17.4	--	--	--	--
[REDACTED]	0261	6.9	8.2	7.9	9.2	10.2	9.5	9.3	9.5	--	--	--	--	3.6	7.1	6.5	0.95	4.8	5.3	1.4	0.76	--	--	--	--
[REDACTED]	0331	5	7.5	11.5	10.8	10.5	12.8	14.4	19.4	--	--	--	--	1.7	1.3	1.5	0.81	4 J	8.8	23.2	15.8	--	--	--	--
[REDACTED]	0369	10.6	13.4	13.4	10.7	11.7	12.5	12.3	11.3	--	--	--	--	4.6	9.4	6.2	1.9	9.5	9.8	5.5	1.6	--	--	--	--
[REDACTED]	1052	10.6	9	7.6	7.7	6.9	10.4	9.6	9.1	--	--	--	--	7.5 J-	7.4 J-	2.9 J-	1.3 J-	9.6 J-	17 J-	8.1 J-	9.3 J-	--	--	--	--
[REDACTED]	1033	6.6	6.3	5.6	7.8	7.6	6.7	7.6	7.7	--	--	--	--	3.1 J+	2.9 J+	3.6 J+	5.3 J+	10 J	3.2	4.6	1.3	--	--	--	--
[REDACTED]	1000	9.5	7.7	8	8.8	7.5	11.7	10.9	10.1	--	--	--	--	5.8	4.2	2.3	1.1	27.4	23.2	4.5	1.6	--	--	--	--

Notes:

" = inches below ground surface

'-' = no data for depth interval or sample section

J = the analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample

U = the analyte was analyzed for but was not detected above the reported sample quantitation limit or the analyte concentration is less than five times the blank concentration

mg/kg = milligrams per kilogram

Results equal to or exceeding the cleanup levels are shaded.

Residential cleanup levels are 32 mg/kg for arsenic, 37 mg/kg for cadmium, 400 mg/kg for lead and 6,400 mg/kg for zinc.

**Table 3-1. Laboratory Analytical Results for Properties Less than 5,000 Square Feet**  
*Old American Zinc Plant Superfund Site*

Property Address	Property ID	Lead (mg/kg)								Zinc (mg/kg)								Zinc (mg/kg)							
		Back				Front				Middle				Back				Front				Middle			
		0-6"	6-12"	12-18"	18-24"	0-6"	6-12"	12-18"	18-24"	0-6"	6-12"	12-18"	18-24"	0-6"	6-12"	12-18"	18-24"	0-6"	6-12"	12-18"	18-24"	0-6"	6-12"	12-18"	18-24"
[REDACTED]	0021	252	245	112	134	90.3	91.5	19.4	25.4	--	--	--	--	1240	1400	542	726	1000	734	183	111	--	--	--	--
[REDACTED]	0041	--	--	--	--	606	59.7	23.6	28.3	--	--	--	--	--	--	--	--	1200	268	458	287	--	--	--	--
[REDACTED]	0084	883	123	103 J	34.3	440	477	260	63.3	--	--	--	--	1680	271	352	305	1910	1010	926	491	--	--	--	--
[REDACTED]	0565	2300	269	24.4	107	121	38.9	24	35.1	364	255	164	33.2 J	1350	1890	330	1120 J	371	137	90.4	191	707	527	497	272 J
[REDACTED]	0111	234	88.4	45.3	31.2	93.5	297	3650	67.8	--	--	--	--	499	314	340	349	300	460	502	375	--	--	--	--
[REDACTED]	1055	201	90.4	38.6	59.5	109	18.1	34.5	41.2	--	--	--	--	875	506	328	341	1040	184	340	340	--	--	--	--
[REDACTED]	0793	21	52.3	16.4	16.2	39	21.2	135	41.7	--	--	--	--	104	185	86.4	253	336	121	1020	890	--	--	--	--
[REDACTED]	0261	45.8	63.5	47.5	19.9	65.1	52.3	20.2	18.7	--	--	--	--	283	293	281	104	373	314	162	102	--	--	--	--
[REDACTED]	0331	27.2	21.2	18.7	19.4	47	95.7	239	859	--	--	--	--	195	168	165	113	317	895	1080	2920	--	--	--	--
[REDACTED]	0369	143	55.2	36.8	17.6	64.3	34.4	24.6	19.5	--	--	--	--	316	395	397	218	454	362	409	185	--	--	--	--
[REDACTED]	1052	89	78.1	22.6	13.7	107	85.7	47.8	65.7	--	--	--	--	437	476	292	189	578	732	456	532	--	--	--	--
[REDACTED]	1033	54.7	57.8	42.2	69.2	242 J	57.3	65.8	42.8	--	--	--	--	514	655	219	507	890 J	291	345	144	--	--	--	--
[REDACTED]	1000	101	35.5	18	14.8	94.8	67.6	36	17.7	--	--	--	--	353	199	155	116	386	433	242	106	--	--	--	--

Notes:

" = inches below ground surface

'-' = no data for depth interval or sample section

J = the analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample

U = the analyte was analyzed for but was not detected above the reported sample quantitation limit or the analyte concentration is less than five times the blank concentration

mg/kg = milligrams per kilogram

Results equal to or exceeding the cleanup levels are shaded.

Residential cleanup levels are 32 mg/kg for arsenic, 37 mg/kg for cadmium, 400 mg/kg for lead and 6,400 mg/kg for zinc.

Table 3-2. Laboratory Analytical Results for Properties  
Greater than 5,000 Square Feet or 1 Acre  
Old American Zinc Plant Superfund Site

Property Address	Property ID	Arsenic (mg/kg)																			
		A				B				C				D				E			
		0-6"	6-12"	12-18"	18-24"	0-6"	6-12"	12-18"	18-24"	0-6"	6-12"	12-18"	18-24"	0-6"	6-12"	12-18"	18-24"	0-6"	6-12"	12-18"	18-24"
[REDACTED]	0008	8.2	7.9	8.9	7.1	11.4	9.7	8.6	6.4	8.3	10.3	8.8	8.6	8.1	11.5 J-	10.1	10.2	--	--	--	--
[REDACTED]	0427	6.9	6.3	9	13	8.2	6.3	5.5	9.3	9.5	8.2	5.8	24.5 J	6.4	7.2	12	8.8	--	--	--	--
T [REDACTED]	0011	10.4	9.4	12.3	10.4	11.2	10.6	8.8	9.5	9.9	13	10.6	9.4	21.8	11.7	7.7 J	6.6	--	--	--	--
[REDACTED]	0027	12.5	12	9.1	8.7	10.1	10.9	9.7	10.8	10.3	11.6	8.5	8.5	11.3	10.8	10.3	8.3	--	--	--	--
[REDACTED]	0047	10.5	12.6	12.9	8.3	10.4	11.1	11	9.6	14.5	19	10.5	12	14.6	13.2	10.9	9.7	--	--	--	--
[REDACTED]	0061	11.2	14.5	10.5	5.1	7.8	9.8	7.9	9.1	12.2	8.9	10	6.7	12.8	11	6.1	5.5	--	--	--	--
[REDACTED]	0069	6.8	7.3	6.6	9.2	13.2 J	8.4	10.7	9.1	8.2	8.8	9.6	8.9	7.4	9.1	9.4	8.8	--	--	--	--
[REDACTED]	0072	11.8	12.3	11.4	9.5	10.9	12.1	8.9	8.8	10.6	12.1	12.3	9.6 J+	10	4.9	8.2	9.8	--	--	--	--
[REDACTED]	0815	9.2	7.5	8	8.1	10.9	9	8.6	9.4	7.9	8.7	8.4	7.6	8.4	9.4	6.6	8	--	--	--	--
[REDACTED]	0108	9.5	9.4	7.8	7.9	8.7	8.9	7.6	7.5	9.9	8.8	8.7	8.2	9.7	10.2	7.8	12.3	--	--	--	--
[REDACTED]	0131	7.8	6.9	6.4	5.6	7.8	8.2	5.9	5.9	8.5	6.2	5.9	6.1	20.6	8.7	8.3	8.1	--	--	--	--
[REDACTED]	0917	8.8	8.3	15.3 J	9	8.3	13.5	12	9.2	9	11.2	10.2	9.9	9	10.5	7.3	7	--	--	--	--
[REDACTED]	0200	6.1	9.1	7.9	8.1	10.1	8.1	9.1	7.9	6.2	6.2	8.6	9	8.5	7.9	8.1	8.1	--	--	--	--
[REDACTED]	0201	10.1	10.2	10.7	8.1	11.1	11	10.2	7.7	8.8	10	9.5	8.7	8.1	10.5	10	9.5	--	--	--	--
[REDACTED]	0203	7.1	8.9	11.2	7.8	11.1	10.7	10.5	9.9	10.2	9.9	8.8	8.3	16.9	9.4	10.9	8.7	--	--	--	--
[REDACTED]	0242	12.4	11.7	7.5	8.2	11.2	10.4	8.9	7.4	9	12	7.7	7.1	15.9	11	9.8	8.4	--	--	--	--
[REDACTED]	0255	6.6	6.9	7.1	7.2	6.6	7.5	7.5	7.1	9.2	7.6	6.6	7.9	7	8.4	8.2	7.7	--	--	--	--
[REDACTED]	0256	7.7	10.1	6.9	6.6	9.6	8.2	7	5.5	7.5	8.4	5.7	7.4	12.3	8	6.8	7	--	--	--	--
[REDACTED]	0294	9.5	9.1	11.8	7.3	15.9	9.2	11.3	11.5	11.2	10.2	11.5	10	10.5	11.3	12.2	11.1	--	--	--	--
[REDACTED]	1019	6.7	10.1	7.8	8.9	5.7	11.5	6.8	7.1	7.4	6.7	6.3	6.8	6.8	7.7	8.2	7.1	--	--	--	--
[REDACTED]	1030	5.5	7.3	9	7	8.1	9.6	8.6	9.2	7.5	9.8	7.9	8.7	8.8	10	8	7.6	--	--	--	--
[REDACTED]	1028	7	5.9	8.5	6.5	4.3	6.1	5.3	5.7	4.4	5.4	5.4	5	4	4.8	3.8	5	--	--	--	--
[REDACTED]	1012	8.5	7.5	7.9	6.6	7.4	9.8	7.7	10	7.7	8.2	6.6	8.7	6.6	9.7	8.3	6.7	--	--	--	--
[REDACTED]	1011	6.7	7.7	7.9	7.6	7.3	8.8	7.5	9.2	6.6	7.3	8.1	7.8	8.7	7.9	6.7	7.2	--	--	--	--
[REDACTED]	0306	11	12.8	22.4	11.5	11.9	13.9	20.1	11.5	17.4	24.4	10.6	9.6	11.5	12.1	10	8.8	--	--	--	--
[REDACTED]	0311	4.8	5.4	6	5.8	4.3	5.7	5.8	7.1 J	5.9	4.8	5	6.5	5.7	5.6	5.6	5.8	--	--	--	--
[REDACTED]	0313	10.8	27.1 J	11.1	8.5	10.5	8.5	11.8	10.6	13.1	12.6	11.7	9.9	12.1 J+	10.3	10.4	10	--	--	--	--
[REDACTED]	1054	10.9	7.6	14.6	10.7	5.8	5.1	8.3	9.2 J	6	4	4.9	10.3	9.6	9.3	9	7.3	--	--	--	--
[REDACTED]	1018	7.4	7.8	7.1	8.6	10.6	7.8	8	6.6	9.4	9.5	8.5	5.7	7.2	6.8	7.4	5.5	--	--	--	--
[REDACTED]	0915	7.4	7.5	7	8	9.4	8.7	9.2	11.9	12	12.1	10.6	10.1	15.2	8.4	11.6	9.4	7.8	5.5	5.6	6.2
[REDACTED]	0893	16.4	9.5	7.7	10.3	14.6	7.8	8.3	10.5	14.1	9	9	9.3	14.9	10	8.8	9.5	--	--	--	--

Notes:

" - inches below ground surface

' - no data for depth interval or sample section

J - the analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample

U - the analyte was analyzed for but was not detected above the reported sample quantitation limit or the analyte concentration is less than five times the blank concentration

mg/kg - milligrams per kilogram

Results equal to or exceeding the cleanup levels are shaded.

Residential cleanup levels are 32 mg/kg for arsenic, 37 mg/kg for cadmium, 400 mg/kg for lead and 6,400 mg/kg for zinc.

Table 3-2. Laboratory Analytical Results for Properties  
Greater than 5,000 Square Feet or 1 Acre  
Old American Zinc Plant Superfund Site

Property Address	Property ID	Cadmium (mg/kg)																			
		A				B				C				D				E			
		0-6"	6-12"	12-18"	18-24"	0-6"	6-12"	12-18"	18-24"	0-6"	6-12"	12-18"	18-24"	0-6"	6-12"	12-18"	18-24"	0-6"	6-12"	12-18"	18-24"
	0008	11.1	13.7	2.6	3.7	15.9	18.5	10.9	0.9	9.5	17.8 J-	3.4	3.3	7	19.4 J-	1.5	0.72	--	--	--	--
	0427	2.1	9	3.1	42.9	3.8	6.2	10	9.2	5	6.8 J	1.2	58.2 J	3.6	3.1	6.1	31.4	--	--	--	--
	0011	16.9	8.2	22	7.2 J	13.4	11.2	12.7	0.29 J	16.8	16.4	7.7	3.7	10.8	15.6	3	0.59	--	--	--	--
	0027	23.8	23.6	4.6	2.3	34.6	18.1	2.5	5.8	27.4	23.3	1.3	5.7	28.4	19.2	18.2	1.8	--	--	--	--
	0047	24.4	30	9.2	10.8	23.9	17.1	9.9	2	24.5	12.4	2.3	3.4	23.4 J	4.5	4.9	2.2	--	--	--	--
	0061	5.6 J-	7.3 J-	4.5 J-	0.67 J-	4.2 J-	10.5 J-	3 J-	1.7 J-	9.6 J-	4.3 J-	2.9 J-	2.5 J-	7.9 J-	2.3 J-	5.2 J-	3.3 J-	--	--	--	--
	0069	4.4 J-	4.5 J-	1.9 J-	1.6	8.9 J	4.8	3.4	2.9	5.7	3.7	2.8	1.8	5	7.4	4.7	1.3	--	--	--	--
	0072	7.7 J-	3.6 J-	1.4 J-	1 J-	5.6 J-	4.2 J-	0.71 J-	0.6 J-	4.1 J-	3.9 J-	1.6 J-	2.8 J-	2.4	1.1	0.76	0.77	--	--	--	--
	0815	17.1 J-	8 J-	5.2 J-	3.7 J-	14.1 J-	8.3 J-	1.1 J-	1.7 J-	3.7 J-	10.6 J-	2.8 J-	0.69 J-	8.1 J-	10.9 J	2.9	3.9	--	--	--	--
	0108	5.6	4.8	1.3	0.75	6.1 J-	4.1 J-	1.7 J-	0.89 J-	4.7 J-	3.7 J-	1.4 J-	1.5 J-	3.8 J-	2.7 J-	1.7 J-	1.2 J-	--	--	--	--
	0131	7.4	3.1	1.3	0.81	8.4	7.1	1.3	0.95	9.4	1.6	0.85	0.98	6.9	2.3	1.5	1.4	--	--	--	--
	0917	3.7	2.9	10.1 J	4.2	4.2	17.6	7.8	1.4	3.7	11.9	6.2	6	5.2	12.5 J	1.3	0.94	--	--	--	--
	0200	1.3 J+	3.4 J+	0.81 J-	0.28 J-	5.5 J-	6.3 J-	4.1 J-	1.2 J-	2 J-	1.6 J-	3.9 J-	0.41 J-	2.3 J-	3.6 J-	2.1 J-	0.65 J-	--	--	--	--
	0201	2.3 J-	5 J-	4.5 J-	0.58 J-	2.7 J+	3.9 J+	2.5 J+	1.8 J+	1.6 J+	4.4 J+	4.1 J+	1.9 J+	1.7 J+	3.5 J+	2.7 J+	1.5 J+	--	--	--	--
	0203	3.4 J+	4 J+	4.2 J+	1.1 J+	3.7 J+	4.8 J+	2.4 J+	1.7 J+	4 J+	3.3 J+	1.9 J+	3.6 J+	2.7 J+	2.5 J+	1.5 J+	0.77 J+	--	--	--	--
	0242	6.3	5.4	1.1	0.46 J	9.2	3.6	1.1	0.74	2	6.2	0.76	0.74	8.1	4.4	2.8	0.68	--	--	--	--
	0255	4.4	4.6	3	1.3	4.5	5.9	4.4	4.3	3.6	5	0.94	0.43 J	7 J	4.6	5.4	1.7	--	--	--	--
	0256	7.6 J+	5.1 J+	2.8 J+	0.49 U	7.9 J+	3.5 J+	1.6 J+	0.43 J+	3.7 J+	1.8 J+	0.75 J+	0.94 J+	6.9 J+	2.1	0.86	0.55	--	--	--	--
	0294	4.2	3.8	6.4	1.1	2.9	2.1	6	3.9	6	6.7	8.1	4.3	7.6	11	8.3	5.1	--	--	--	--
	1019	7.8	6.7	10.8	5.8	6.1	4.9	1.4	3.6	6.7	6	3.5	1.5	6.4	9.5	2.7	1.4	--	--	--	--
	1030	3.3	8.7	5.6	1.8	7.2	7.3	1.6	1.9	7.5	5.5	0.95	2.3	3.8	7.5	2.7	0.82	--	--	--	--
	1028	8	5.8	6.3	4.3	5.6	2.2	0.57	1.2	6.3	4.6	1.4	0.71	6.9	6.3	1	0.4 J	--	--	--	--
	1012	9.5	7.4 J	3.5	1.7	6.4	1.4	2	10.2	5.2	3.7	1.6	0.62	5.8	4.6	4.3	2.3	--	--	--	--
	1011	5	4.8	5.1	5.5	3.2	3.8	4.6 J	10.7	5	7.4	8.2	3.1	7.3	6.5	3.3	0.8	--	--	--	--
	0306	3.1 J-	2.4 J-	6.9 J-	1.7	6	5.2	8.9	2.1	8.5	6.6	1.8	0.52 J	3	5.6 J	2.4 J-	0.51 J-	--	--	--	--
	0311	2.9	4.8	1.8 J-	1	3.1	3.8	2.7	0.84	2.4	3.2	2	0.78	3.8	3.3	1.2	0.66	--	--	--	--
	0313	4.9 J-	8.5 J	2.6 J-	0.44 J	7.6 J-	3.4 J-	6.4 J-	3.8 J-	7.8 J-	12.4 J-	1.4 J-	0.9 J-	9.2 J	1.5	0.98	0.57	--	--	--	--
	1054	0.76 J-	6.4 J-	5.1 J-	1.6 J-	2.2 J-	0.27 J-	6.5 J-	5.1 J	0.87 J-	0.31 J-	0.15 J-	4.4 J-	4.5 J-	2.1 J-	4.4 J-	0.94 J-	--	--	--	--
	1018	10.5 J+	8.8 J+	4.6 J+	1 J+	27.1	6.6	8.3	2	18.4	13.4	3	1	10.1	7.5 J	3.4	0.87	--	--	--	--
	0915	12.2 J-	17.3 J-	9.5 J-	0.92 J-	16.8 J-	13.8 J-	2.9 J	11.7 J-	20.1 J-	16.5 J-	14.3 J-	2.7 J-	31.1 J-	3.6 J-	20.8 J-	0.95 J-	23 J-	0.82 J-	1.3 J-	0.62 J-
	0893	68.9	71.7	23.2	12.7	53.4	72.1	36.8	1.5	67.8	64.1	15.5	6.8 J	59.2	47.8	6.9	3.6	--	--	--	--

Notes:

" - inches below ground surface

' - no data for depth interval or sample section

J - the analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample

U - the analyte was analyzed for but was not detected above the reported sample quantitation limit or the analyte concentration is less than five times the blank concentration

mg/kg - milligrams per kilogram

Results equal to or exceeding the cleanup levels are shaded.

Residential cleanup levels are 32 mg/kg for arsenic, 37 mg/kg for cadmium, 400 mg/kg for lead and 6,400 mg/kg for zinc.

Table 3-2. Laboratory Analytical Results for Properties  
Greater than 5,000 Square Feet or 1 Acre  
Old American Zinc Plant Superfund Site

Property Address	Property ID	Lead (mg/kg)																					
		A				B				C				D				E					
		0-6"	6-12"	12-18"	18-24"			0-6"	6-12"	12-18"	18-24"			0-6"	6-12"	12-18"	18-24"			0-6"	6-12"	12-18"	18-24"
	0008	69.5	77.9	31.6	26.2	262	88.1	85.5	16.4	125	180 J	25.4	42.5	86.8	251 J	21.7	22.1	--	--	--	--		
	0427	41.6	23.5	38.4	332	51.2	41.1	25.9	50.5	58.7	51.7	12.1	407 J	48.4	114	22.9	45.2	--	--	--	--		
	0011	68.5	35	120	31.5	82	57.9	29.8	14.7	146	187	50.4	33.9	223	69.4	24 J	17.6	--	--	--	--		
	0027	428	151 J	16.3	13.2	262	118	83.5	31.1	232	312	40.9	79.5	189	162	108	17.3	--	--	--	--		
	0047	182	161	79.8 J	60.3	214	123	87	199	257	190	45.8	66.9	280	140	48.1	42.4	--	--	--	--		
	0061	117	120	47.4	18	107	183	59.2	39.6	784	118	59.8	50.2	501	132	66.8	48.3	--	--	--	--		
	0069	110	67.2	34.6	28.8	198 J	138	77.9	45.5	85.2	63.3	55.1	35.9	84	126	94.3	21.9	--	--	--	--		
	0072	156	73	32.6	25.1	95.3	57.8	20.2	17.5	118	133	28.6	27.2	74.6	61.9	16.1	40.7	--	--	--	--		
	0815	179	95.7	63.9 J	33.7	172	94.1	18	30.1 J	56.1	97.8	20.4	16	185	132 J	23.7	140	--	--	--	--		
	0108	83.6	84.1	18	18.1	117	69.6	19.8	18.4	262	139	64.2	37.9	272	141	29.7	30.3	--	--	--	--		
	0131	199	87.5	45.3	16.9	195	122	36.5	22.6	245	48.1	20.4 J	25.1	284	72.6	26.9	28.7	--	--	--	--		
	0917	72.2	35	55 J	20.2	43.6	211	128	26.1	29.1	40.5	36.7	26.4	43.9	37.4	13.2	15.6	--	--	--	--		
	0200	22.3	32.7	19.4	13.7	47.1	54.9	42.5	16.9	35.2	15.8	30.9	17.2	264	32.9	19.5	15.8	--	--	--	--		
	0201	38.4	33.5	38.2	15.2	69.1	44.5	39.3	23.9	27.5	36.3	34.6	20	30.5	49.4 J	30.3	21.5	--	--	--	--		
	0203	36.8	51	49.3	19	51	52.7	27.9	25.8 J	49.2	29.1	20.8	40.2	31.8	33.6	17.8	16.9	--	--	--	--		
	0242	62.3	48.6	16.8	13.8	79	39	17.3	13.4	31.2	62.4	16.2	19.7	174	40.2	28.9	19.5	--	--	--	--		
	0255	47.7	43.1	32	19.7	46.6	56.4	44.6	46.7	46.3	58.2	18.7	16.4	68	42.7	52.5	14.4	--	--	--	--		
	0256	108	84.5	42	32.6	90.7	53.6	34.6	17.7	137	62.2	35.3	38.4 J	101	48.5	35.4	23.5	--	--	--	--		
	0294	61.7	66.1	55.1	42.2	58.2	48.1	77.1	50.6	98.8	255	73.8	39.9	74.6	79.7	53.2	24.9	--	--	--	--		
	1019	69.4	48.3	71.4	32	69.7	199	16.8	39.3	98.6	70	33.1	20.2	70.4	72.1	31.6	40.1	--	--	--	--		
	1030	63	131	72.5 J	33.4	87.9	83.3	28.8	34.4	113	61	23.4	43.8	49.7	78.9	34.6	16.5	--	--	--	--		
	1028	258	91.6	139	61.5	41	23.9	14.6	20	67.9	45.8	18.7	16.1	66.1	49.2	17.8	14	--	--	--	--		
	1012	75.9	50.2 J	26	15	76	24.6	13.3	94.2	44.8	23.3	12.5	17.8	134	54.5	42.3	35	--	--	--	--		
	1011	52.7	45.2	67.4	43.2	43.9	45.5	31.9 J	71.2	44.8	51.5	71.4	18.8	58.9	69.4	28.6	25.3	--	--	--	--		
	0306	122	97	484	74.7	189	225	267	66	479	479	156	24.5	464	294 J	52.8	23.5	--	--	--	--		
	0311	44.4	46.2	22.2	20.7	147	79.3	32.4	26.7	41.6	58.1	37.5	26.6	65.6	56.7	25.8	25.5	--	--	--	--		
	0313	93.3	198 J	63.4	17.7	152	80	187	158	244	276	44.5	61.5	330	46.3	49.3	24.7	--	--	--	--		
	1054	69.7	212	460	34.9	34.5	19.8	114	241 J	24.2	15.8	11.7	189	83.5	42.6	118	18.5	--	--	--	--		
	1018	109	108	56.7	25.5	1020	62.4	206	66	220	461	25.2	22.9	100	59.3 J	27.7	15.4	--	--	--	--		
	0915	141	167	62.6	18	87.8	96.1	30.8 J	134	179	89.6	38	18.7	322	29	111	14.3	217	14.1	17.4	12.8		
	0893	286	31	20.7	23.1	204	18.4	28.2	15.5	214	18.9	13.8	14.5	191	17.1	14	17	--	--	--	--		

Notes:

" - inches below ground surface

' - no data for depth interval or sample section

J - the analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample

U - the analyte was analyzed for but was not detected above the reported sample quantitation limit or the analyte concentration is less than five times the blank concentration

mg/kg - milligrams per kilogram

Results equal to or exceeding the cleanup levels are shaded.

Residential cleanup levels are 32 mg/kg for arsenic, 37 mg/kg for cadmium, 400 mg/kg for lead and 6,400 mg/kg for zinc.

Table 3-2. Laboratory Analytical Results for Properties  
Greater than 5,000 Square Feet or 1 Acre  
Old American Zinc Plant Superfund Site

Property Address	Property ID	Zinc (mg/kg)																			
		A				B				C				D				E			
		0-6"	6-12"	12-18"	18-24"	0-6"	6-12"	12-18"	18-24"	0-6"	6-12"	12-18"	18-24"	0-6"	6-12"	12-18"	18-24"	0-6"	6-12"	12-18"	18-24"
	0008	652	722	333	360	860	751	572	204	592	911 J	391	327	409	777 J	177	229	--	--	--	--
	0427	175	270	216	1970	262	362	471	663	380	461 J	104	1870 J	245	337	296	1100	--	--	--	--
	0011	603	422	771	450	682	498	532	154	1130	903	723	567	1070	713	427 J+	118	--	--	--	--
	0027	1320	917	432	295	1110	692	183	191	1210	1140	152	364	1080	907	765	433	--	--	--	--
	0047	1270	1090	617	470	1430	1160	789	206	1490	942	467	301	799	670	615	265	--	--	--	--
	0061	657	627	396	141	726	1360	343	292	2120	677	479	573	1480	467	697	550	--	--	--	--
	0069	574	464	312	214	2540 J	1100	797	329	439	331	267	180	384	471	374	162	--	--	--	--
	0072	538	435	269	306	418	299	152	343	422	405	231	487 J	292	120	177	128	--	--	--	--
	0815	988	686	495	554	802	623	193	205	456	615	343	150	543	532 J	265	492	--	--	--	--
	0108	352	297	183	140	375	289	218	175	455 J-	336 J	222 J	209 J	471 J	309 J	185 J	268 J	--	--	--	--
	0131	632	380	140	76.4	628	496	257	89.3	657	154	82.5	90.1	663	252	115	121	--	--	--	--
	0917	444	212	441	319	244	690	567	232	220	482	349	294	347	509	308	171	--	--	--	--
	0200	135	233	131	101	320	378	227	183	280	109	214	79.6	203	222	165	99.7	--	--	--	--
	0201	221	299	283	86.7	306	266	253	182	174	254	229	138	183	234 J	200	134	--	--	--	--
	0203	239	336	365	99.2	291	334	173	183 J	245	230	170	233	196	191	141	79.7	--	--	--	--
	0242	361	357	160	81.5	447	281	159	92.6	222	369	155	117	701	294	216	127	--	--	--	--
	0255	306	299	229	130	277	333	262	266	264	328	134	100	424	367	324	170	--	--	--	--
	0256	887	657	377	86.2	309	260	189	63.1	257	215	226	117	486	209	150	99.5	--	--	--	--
	0294	276	230	316	138	212	189	334	246	485	412	420	220	378	481	437	336	--	--	--	--
	1019	436	425	385	309	400	506	160	249	559	361	221	152	444	572	260	147	--	--	--	--
	1030	259	463	291	234	545	347	155	230	567	370	193	256	265	1770	212	101	--	--	--	--
	1028	1160	418	538	805	300	149	63.6	100	325	257	97.1	67.1	365	336	85.4	55.7	--	--	--	--
	1012	543	432 J	290	168	404	122	99	477	320	299	247	112 J	454	372	317	199	--	--	--	--
	1011	400	347	359	400	295	328	312	634	348	425	459	306	413	364	288	91.3	--	--	--	--
	0306	295 J	228 J	879 J	371	501	872	670	284	927	823	285	137	453	523 J	248	123	--	--	--	--
	0311	241	295	159	117	272	245	196	97.8	251	221	188	104	298	337	131	91.8	--	--	--	--
	0313	418	689 J	345	153	609	314	659	356	769	721	344	236	1140	530	460	181	--	--	--	--
	1054	211	897	499	362	249	66.1	795	500	90.7	57.8	54.7	537	398	229	419	271	--	--	--	--
	1018	534	540	276	106	1440	918	654	267	1780	882	234	120	525	431 J	276	89.2	--	--	--	--
	0915	679 J	839 J	609 J	122 J	679 J	709 J	289 J-	1640	1300	793	711	237	1950	865	900	452	1120	217	203	105
	0893	1500	2090	1570	1300	1130	1790	1920	603	1500	2030	1440	970	1350	2050	882	601	--	--	--	--

Notes:

" - inches below ground surface

' - no data for depth interval or sample section

J - the analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample

U - the analyte was analyzed for but was not detected above the reported sample quantitation limit or the analyte concentration is less than five times the blank concentration

mg/kg - milligrams per kilogram

Results equal to or exceeding the cleanup levels are shaded.

Residential cleanup levels are 32 mg/kg for arsenic, 37 mg/kg for cadmium, 400 mg/kg for lead and 6,400 mg/kg for zinc.

**Table 3-3. Summary of Soil Results on a Per-Sample Basis***Old American Zinc Plant Superfund Site*

	Arsenic	Cadmium	Lead	Zinc
Residential Samples Analyzed	604	604	604	604
Residential Samples Exceeding Cleanup Levels	0	10	18	0
Residential Range of Concentrations (mg/kg)	3.8 - 27.1	0.15 - 72.1	11.7 - 3,650	54.7 - 2,920
Residential Average Concentration (mg/kg)	9.27	6.66	96.16	460.83

Notes:

Tables 3-1, 3-2, 3-3 and 3-4 include soil results for properties sampled.

This table includes 604 primary samples collected in 2019. The greater of a normal or field duplicate result was used in these calculations.

Cleanup levels are 32 mg/kg for arsenic, 37 mg/kg for cadmium, 400 mg/kg for lead and 6,400 mg/kg for zinc.

mg/kg = milligrams per kilogram

**Table 3-4. Summary of Soil Results on a Per-Property Basis***Old American Zinc Plant Superfund Site*

	Arsenic	Cadmium	Lead	Zinc
Residential Properties Analyzed	44	44	44	44
Residential Properties Exceeding Remediation Goal	0	2	11	0
Total Properties Exceeding Remediation Goals: 12				

Notes:

Tables 3-1, 3-2, 3-3 and 3-4 include soil results for properties sampled.

This table includes 604 primary samples collected in 2019. The greater of a normal or field duplicate result was used in these calculations.

Residential cleanup levels are 32 mg/kg for arsenic, 37 mg/kg for cadmium, 400 mg/kg for lead and 6,400 mg/kg for zinc.

Table 3-5. Summary of Soil Sampling Results Exceeding Cleanup Levels

*Old American Zinc Plant Superfund Site*

Depth (inches below ground)	Arsenic			Cadmium			Lead			Zinc		
	Number of Samples Exceeding CL	Number of Samples Collected	Exceedance Frequency per Depth	Number of Samples Exceeding CL	Number of Samples Collected	Exceedance Frequency per Depth	Number of Samples Exceeding CL	Number of Samples Collected	Exceedance Frequency per Depth	Number of Samples Exceeding CL	Number of Samples Collected	Exceedance Frequency per Depth
<b>Residential Properties</b>												
0–6	0	151	0.0%	4	151	2.6%	10	151	6.6%	0	151	0.0%
6–12	0	151	0.0%	4	151	2.6%	3	151	2.0%	0	151	0.0%
12–18	0	151	0.0%	0	151	0.0%	3	151	2.0%	0	151	0.0%
18–24	0	151	0.0%	2	151	1.3%	2	151	1.3%	0	151	0.0%
<b>Total</b>	<b>0</b>	<b>604</b>	<b>0.0%</b>	<b>10</b>	<b>604</b>	<b>1.7%</b>	<b>18</b>	<b>604</b>	<b>3.0%</b>	<b>0</b>	<b>604</b>	<b>0.0%</b>

Notes:

Exceedance Frequency represents the number of exceedences per 100 samples.

Residential cleanup levels are 32 mg/kg for arsenic, 37 mg/kg for cadmium, 400 mg/kg for lead, and 6,400 mg/kg for zinc.

This table includes 604 primary samples collected in 2019. The greater of a normal or field duplicate result was used in these calculations

mg/kg = milligrams per kilogram

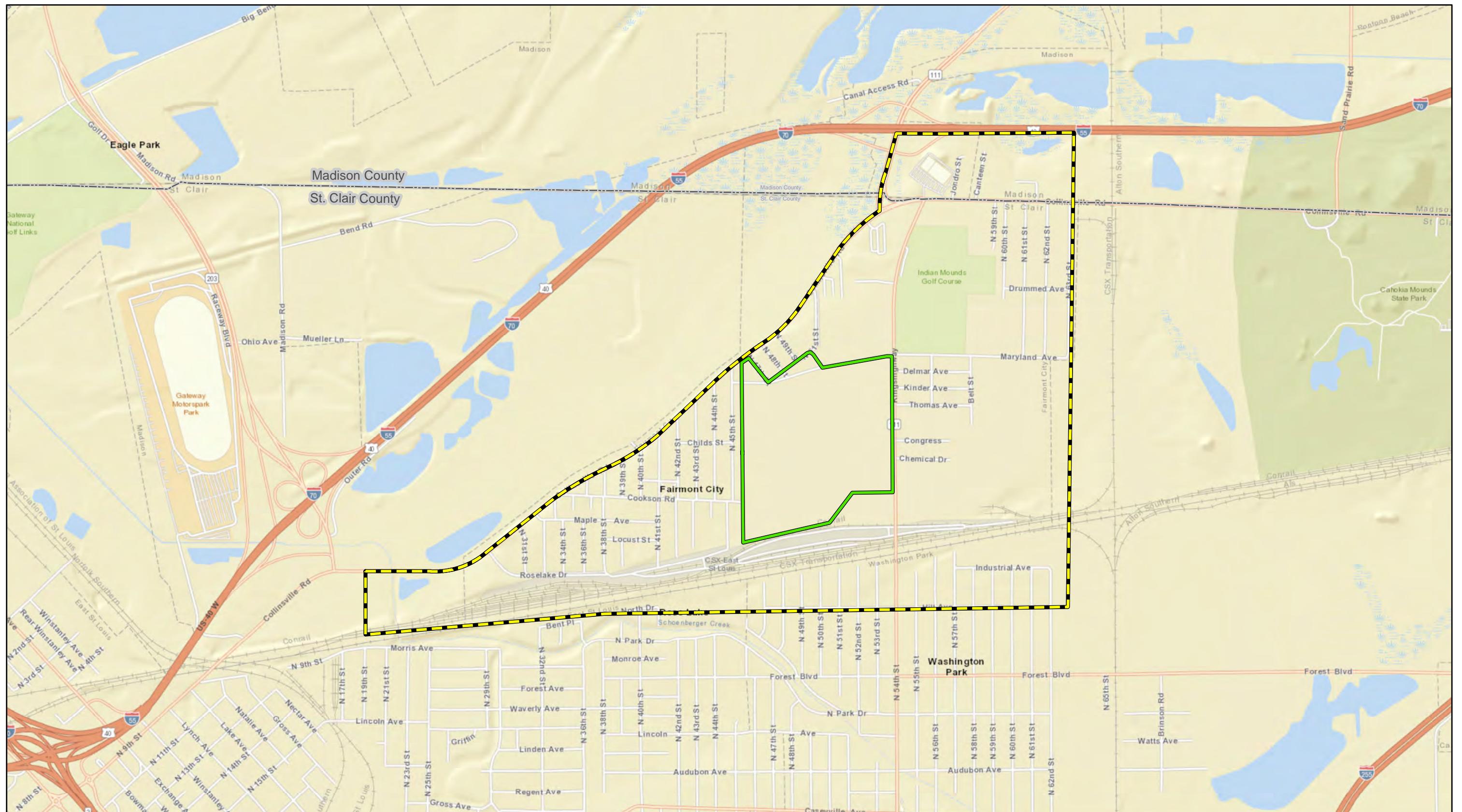
NA = not applicable

**Table 4-1. Properties Above Cleanup Levels**

Old American Zinc Plant Superfund Site

Property Address	Unique ID	Number of		Arsenic Exceedance	Cadmium Exceedance	Lead Exceedance	Zinc Exceedance
		Parcels	Parcel IDs				
[REDACTED]	0008	1	02-10.0-106-057				
[REDACTED]	0427	2	02-09.0-205-028, 02-09.0-205-063		X	X	
[REDACTED]	0011	1	02-10.0-109-051				
[REDACTED]	0021	1	02-10.0-102-065				
[REDACTED]	0027	1	02-09.0-207-026			X	
[REDACTED]	0041	1	02-10.0-106-050			X	
[REDACTED]	0047	1	02-10.0-106-055				
[REDACTED]	0061	1	02-08.0-205-083			X	
[REDACTED]	0069	1	02-08.0-207-032				
[REDACTED]	0072	1	02-08.0-205-076				
[REDACTED]			02-09.0-107-065, 02-09.0-107-066, 02-				
[REDACTED]	0815	6	09.0-107-067, 02-09.0-107-068, 02-09.0-107-069, 02-09.0-107-070				
[REDACTED]	0084	1	02-08.0-204-028			X	
[REDACTED]	0565	1	02-09.0-106-087			X	
[REDACTED]	0108	1	02-08.0-205-082				
[REDACTED]	0111	1	02-08.0-205-081			X	
[REDACTED]	0131	1	02-08.0-201-001				
[REDACTED]	0917	1	02-03.0-307-057				
[REDACTED]	1055	1	02-04.0-312-001				
[REDACTED]	0793	1	02-04.0-308-088				
[REDACTED]	0200	1	02-03.0-201-017				
[REDACTED]	0201	1	02-03.0-201-016				
[REDACTED]	0203	1	02-03.0-201-015				
[REDACTED]	0242	1	02-03.0-102-035				
[REDACTED]	0255	2	02-03.0-103-036, 02-03.0-103-037				
[REDACTED]	0256	1	02-03.0-200-038				
[REDACTED]	0261	1	02-03.0-103-024				
[REDACTED]	0294	1	02-03.0-101-004				
[REDACTED]	1019	1	17-2-20-34-03-301-012				
[REDACTED]	1030	1	17-2-20-34-03-301-024				
[REDACTED]	1028	1	17-2-20-34-03-301-022				
[REDACTED]	1012	2	17-2-20-34-03-301-005, 17-2-20-34-03-301-005.001				
[REDACTED]	1011	1	17-2-20-34-03-301-004				
[REDACTED]	0306	3	02-08.0-206-077, 02-08.0-206-003I, 02-08.0-206-001			X	
[REDACTED]	0311	1	02-03.0-103-033				
[REDACTED]	0313	1	02-08.0-202-045				
[REDACTED]	1054	1	02-08.0-206-014			X	
[REDACTED]	0331	2	02-04.0-302-040, 02-04.0-302-039			X	
[REDACTED]	0369	1	02-03.0-303-052				
[REDACTED]	1052	2	02-03.0-305-012, 02-03.0-305-013				
[REDACTED]	1018	1	17-2-20-34-03-301-011			X	
[REDACTED]	1033	1	17-2-20-34-03-301-027				
[REDACTED]	1000	1	17-1-20-34-03-303-007				
[REDACTED]	0915	1	02-03.0-100-024				
[REDACTED]	0893	2	02-04.0-202-045, 02-04.0-202-046			X	

# Figures



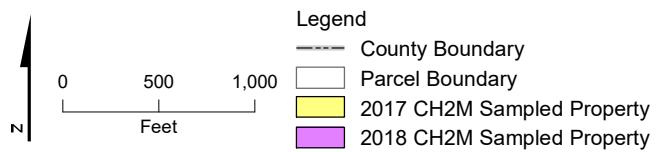
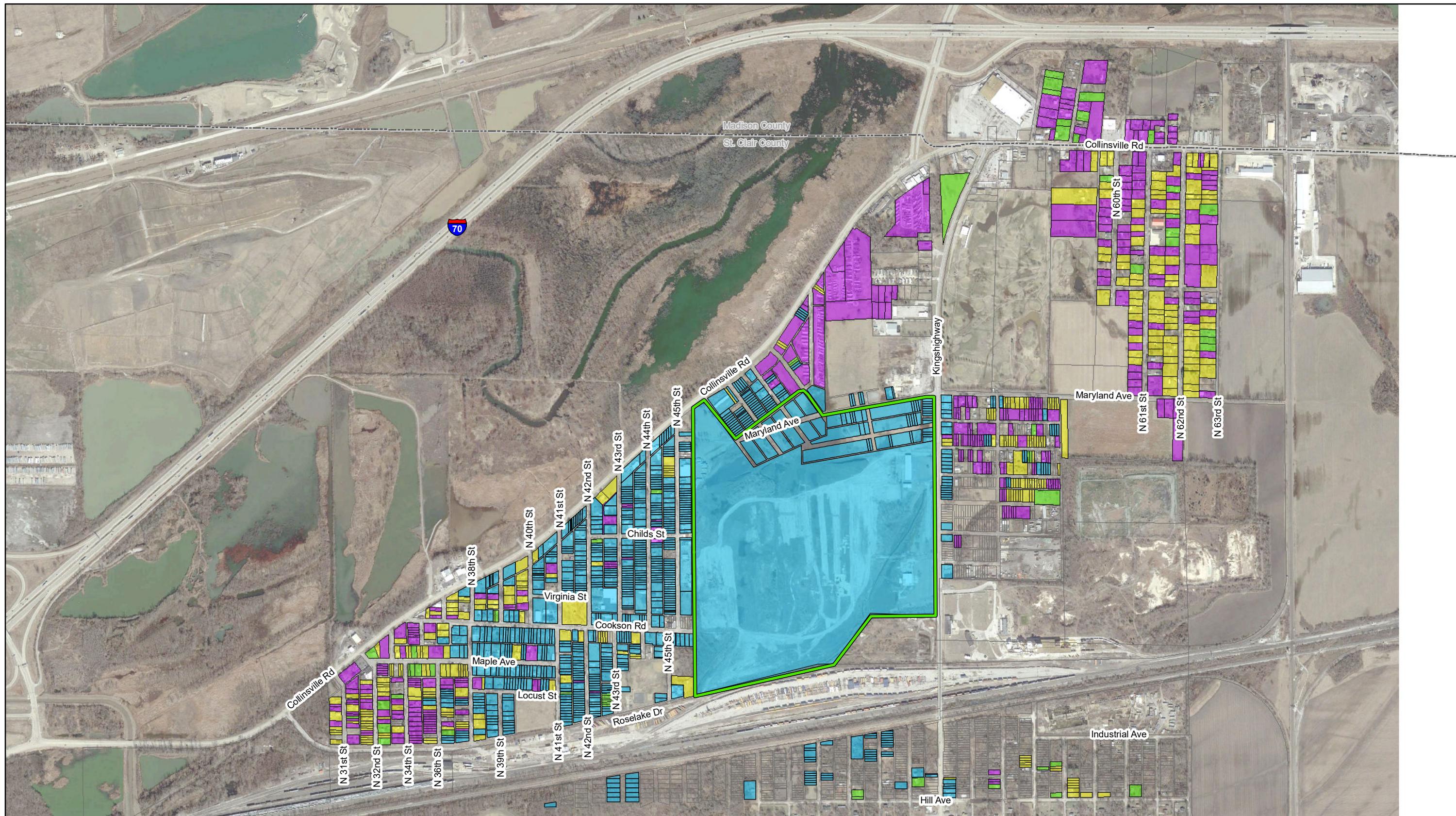
#### Legend

- County Boundary
- Facility Area Boundary
- Site Property (Approximate)

#### Notes:

- Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, © OpenStreetMap contributors, and

Figure 1  
Site Map  
Old American Zinc Plant Superfund Site  
Fairmont City, St. Clair County and  
Madison County, Illinois



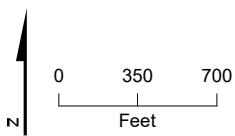
**Notes:**  
1. Google earth Imagery Date: 2/24/2018.

**Figure 2**  
CH2M and Entact Sampled Properties, October 1, 2019  
*Old American Zinc Plant Superfund Site*  
Fairmont City, St. Clair County and Madison County, Illinois



#### Legend

- County Boundary
- Property with Cadmium Concentrations Above Residential Soil Cleanup Level
- Parcel Boundary
- Facility Area Boundary



#### Notes:

1. Google earth Imagery Date: 2/24/2018.
2. Results for each property are located in Tables 3-1 through 3-3.
3. Offsite property results were screened against the residential soil cleanup level based on human health risk. Cadmium = 37 mg/kg

**Figure 3**  
2019 Sampling - Cadmium Concentrations Above Residential Soil Cleanup Level  
*Old American Zinc Plant Superfund Site*  
Fairmont City, St. Clair County and Madison County, Illinois



#### Legend

- County Boundary
- Property with Lead Concentrations Above Residential Soil Cleanup Level
- Parcel Boundary
- Facility Area Boundary

0 425 850  
Feet

#### Notes:

1. Google earth Imagery Date: 2/24/2018.
2. Results for each property are located in Tables 3-1 through 3-3.
3. Offsite property results were screened against the residential soil cleanup level based on human health risk. Lead = 400 mg/kg

**Figure 4**  
2019 Sampling - Lead Concentrations Above Residential Soil Cleanup Level  
*Old American Zinc Plant Superfund Site*  
Fairmont City, St. Clair County and Madison County, Illinois

# Attachment 1

## Data Quality Evaluation

# Data Quality Evaluation, 2019 Residential Soil Sampling, Old American Zinc Plant Superfund Site, Fairmont City, St. Clair County and Madison County, Illinois

**PREPARED FOR:** Sheila Desai/U.S. Environmental Protection Agency (EPA)

**PREPARED BY:** CH2M HILL, Inc. (CH2M)

**DATE:** January 6, 2020

## Introduction

The objective of this data quality evaluation (DQE) technical memorandum (TM) is to assess the data quality of analytical results for soil samples collected from the Old American Zinc Superfund Site in Fairmont City, Illinois. CH2M collected soil samples September 10 through 19, 2019. Guidance for this DQE TM came from the *Old American Zinc Plant Superfund Site, Quality Assurance Project Plan (QAPP)* (CH2M 2017) and QAPP Addendum (CH2M 2018); and the *U.S. Environmental Protection Agency (EPA) Contract Laboratory National Functional Guidelines (NFG) for Inorganic Superfund Methods Data Review, January 2017*.

The analytical results were evaluated using the criteria of precision, accuracy, representativeness, comparability, and completeness (PARCC) as presented in the QAPP. This report is intended as a general data quality assessment designed to summarize data issues.

## Analytical Data

This DQE report covers 604 native soil samples, 61 field duplicates (FDs), 31 matrix spike (MS)/duplicate sets (DUP), and 1 aqueous equipment blank (EB). The samples were reported in 36 sample delivery groups listed in Table 1. Samples were analyzed through the EPA Contract Laboratory Program.

The samples were analyzed for arsenic, cadmium, lead, and zinc by Method ISM02.4.

The sample delivery groups were assessed by reviewing the following: (1) the chain-of-custody documentation, (2) holding-time compliance, (3) initial and continuing calibration criteria, (4) method blanks/field blanks, (5) laboratory control spike sample (LCS) recoveries, (6) MS/DUP recoveries and precision, (7) FD precision, and (8) the required quality control (QC) samples at the specified frequencies.

Data validation flags were assigned according to the project QAPP. Multiple flags are routinely applied to specific sample method/matrix/analyte combinations, but there will only be one final flag. A final flag is applied to the data and is the most conservative of the applied validation flags. The final flag also includes matrix and blank sample impacts.

The data validation flags are defined as follows:

- J = Estimated: The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

- J+ = Estimated high: The analyte was positively identified; the quantitation is a high estimation because of discrepancies in meeting certain analyte-specific QC criteria.
- J- = Estimated low: The analyte was positively identified; the quantitation is a low estimation because of discrepancies in meeting certain analyte-specific QC criteria.
- U = Undetected: The analyte was analyzed for, but not detected or is qualified as a nondetect because of blank contamination.

## Findings

The overall summaries of the data validation are contained in the following subsections. Table 2 presents qualified data.

### Holding Time/Preservation

All acceptance criteria were met.

### Calibration

Initial and continuing calibration analyses were performed as required by the method, and acceptance criteria were met, with the following exceptions:

- Arsenic, cadmium, lead, and/or zinc were detected at concentrations less than the reporting limit (RL) in a few initial and continuing calibration blanks (ICB/CCB). The data were not qualified because the associated sample concentrations were greater than blank concentrations and the RLs.
- Arsenic, cadmium, and/or zinc were detected at negative concentrations in a few ICBs/CCBs. The data were not qualified because the associated sample concentrations were greater than the RLs.

### Method Blanks

Method blanks were analyzed at the required frequency and were free of contamination, with the following exceptions:

- Arsenic, cadmium, lead, and/or zinc were detected at concentrations less than the RL in several method blanks. The data were not qualified because the associated sample concentrations were greater than the blank concentrations and RLs.
- Arsenic, cadmium, and/or lead were detected at negative concentrations in a few method blanks. The data were qualified as estimated low and flagged "J-" when the associated sample concentrations were less than the RL.

### Laboratory Control Samples

LCSs were analyzed as required, and all accuracy and precision criteria were met.

### Matrix Spike

MS samples were analyzed as required, and all accuracy criteria were met, with the following exceptions:

- Arsenic, cadmium, lead, and/or zinc were recovered less than the lower control limit in multiple MSs, indicating a possible low bias. The data were qualified as estimated detected results and flagged "J-" in the respective parent samples.

- Arsenic and/or zinc were recovered greater than the upper control limit in multiple MSs, indicating a possible high bias. The data were qualified as estimated detected results and flagged “J+” in the respective parent samples.
- There were several instances where the MS for lead and/or zinc did not meet control limits due to concentrations in the parent samples being greater than four times the spike concentration. The associated data were not qualified.

## Serial Dilutions

Serial dilutions were analyzed as required, and precision criteria were met, with the following exceptions:

- There were multiple instances where the relative percent differences (RPD) between the native sample and the serial dilution exceeded criteria for arsenic, cadmium, lead, and/or zinc. The data were qualified as estimated detected results and flagged “J” in the associated native samples.

## Post-Digestion Spikes

Post-digestion spikes (PDS) were analyzed as required, and accuracy criteria were met.

## Interference Check Standards

Interference check standards (ICS) were analyzed at the required frequency, and all acceptance criteria were met, with the following exceptions:

- Cadmium was recovered less than the lower control limit in several ICSs, indicating a possible low bias. The data were qualified as estimated and flagged “J-” in the associated samples. In addition, cadmium was recovered greater than the upper control limits in several ICSs, indicating a possible high bias. The data were qualified as estimated and flagged “J+” in the associated samples.

## Field Duplicates

FDs were collected as required, and precision criteria were met, with the following exceptions:

- There were multiple instances where the RPDs for arsenic, cadmium, lead, and/or zinc exceeded control limits in the FD pairs. The data were qualified as estimated detected results and flagged “J” in the respective FD pairs.

## Laboratory Duplicates

Laboratory duplicates were performed as required by the method, and precision criteria were met, with the following exceptions:

- There were multiple instances where the RPDs for arsenic, cadmium, lead, and/or zinc exceeded control limits between the native sample and laboratory duplicate. The data were qualified as estimated detected results and flagged “J” in the respective samples.

## Field Blanks

EBs were collected at the required frequencies, analyzed, and were free of contamination.

## Chain of Custody

Required procedures were followed and were free of errors.

## Overall Assessment

The goal of this assessment is to demonstrate that a sufficient number of representative samples were collected, and the resulting analytical data can be used to support the decision making process.

The following summary highlights the PARCC findings for the above-defined events:

- Precision of the data was verified through the review of the field and laboratory data quality indicators that include: FD, laboratory duplicate, and serial dilution RPDs. Precision was acceptable; however, a total of 138 results for arsenic, cadmium, lead, and/or zinc, out of 905 results analyzed, were qualified as estimated concentrations due to FD, laboratory duplicate, and/or serial dilution RPD issues. Data users should consider the impact to any result that is qualified as estimated as it may contain a bias that could affect the decision-making process.
- Accuracy of the data was verified through the review of the calibration data, LCS, MS, ICS, and PDS recoveries, as well as the review of method/calibration/equipment blank data. Accuracy was acceptable; however, a total of 223 results for arsenic, cadmium, lead, and/or zinc were qualified as estimated concentrations due to MS and/or ICS issues. Arsenic, cadmium, lead, and/or zinc were detected in several calibration and/or method blanks at concentrations less than the RL or at negative concentrations; however, only cadmium was qualified and flagged “J-” in one sample due to a negative method blank contamination.
- Representativeness of the data was verified through the sample’s collection, storage, and preservation procedures and the verification of holding-time compliance. The laboratory did not note any issues related to sample preservation or storage of the samples. All data were reported from analyses within the EPA-recommended holding time.
- Comparability of the data was ensured through the use of standard EPA analytical procedures. Results obtained are comparable to industry standards in that the collection and analytical techniques followed approved, documented procedures.
- Completeness is a measure of the number of valid measurements obtained in relation to the total number of measurements planned. Completeness is expressed as the percentage of valid or usable measurements compared to planned measurements. Valid data are defined as all data that are not rejected for project use. All data were considered valid. The completeness goal of 90 percent was met for all analytes.

## References

CH2M HILL, Inc. (CH2M). 2017. *Quality Assurance Project Plan, Old American Zinc Plant Site, Fairmont City, Illinois*. April.

CH2M HILL, Inc. (CH2M). 2018. *Quality Assurance Project Plan Addendum, Old American Zinc Plant Site, Fairmont City, Illinois*. April.

U.S. Environmental Protection Agency (EPA). 2017. *Contract Laboratory National Functional Guidelines (NFG) for Inorganic Superfund Methods Data Review*. January.

**Table 1. Sample Delivery Groups**

*Old American Zinc Plant Superfund Site, Fairmont City, Illinois*

1909006	METR06	METR08	METR30	METR52	METR75	METR95	METRB7
METRF5	METRH4	METRK4	METRM0	METRN3	METRN5	METRQ5	METRS5
METS36	METS56	METS76	METSA5	METSA7	METSC9	METSE9	METSH4
METSK4	METSM4	METSP4	METSR4	METST4	METSX4	METSZ4	METT14
METT34	METT54	METT81	METTA1				

**Table 2. Data Qualification Summary**  
*Old American Zinc Superfund Site, Fairmont City, Illinois*

Address	Location ID	Sample ID	Analyte	Final Result	Units	Validation		Validation Reasons
						Flag	Reason	
[REDACTED]	OAZ-0200A-00/06	METR06	Cadmium	1.3	J+	mg/kg	ICSA>UCL	
[REDACTED]	OAZ-0200A-06/12	METR07	Cadmium	3.4	J+	mg/kg	ICSA>UCL	
[REDACTED]	OAZ-0200A-12/18	METR08	Cadmium	0.81	J-	mg/kg	ICSA<LCL	
[REDACTED]	OAZ-0200A-18/24	METR09	Cadmium	0.28	J-	mg/kg	ICSA<LCL	
[REDACTED]	OAZ-0200B-00/06	METR10	Cadmium	5.5	J-	mg/kg	ICSA<LCL	
[REDACTED]	OAZ-0200B-06/12	METR11	Cadmium	6.3	J-	mg/kg	ICSA<LCL	
[REDACTED]	OAZ-0200B-12/18	METR12	Cadmium	4.1	J-	mg/kg	ICSA<LCL	
[REDACTED]	OAZ-0200B-18/24	METR13	Cadmium	1.2	J-	mg/kg	ICSA<LCL	
[REDACTED]	OAZ-0200C-00/06	METR14	Cadmium	2	J-	mg/kg	ICSA<LCL	
[REDACTED]	OAZ-0200C-06/12	METR15	Cadmium	1.6	J-	mg/kg	ICSA<LCL	
[REDACTED]	OAZ-0200C-06/12R	METR16	Cadmium	1.4	J-	mg/kg	ICSA<LCL	
[REDACTED]	OAZ-0200C-12/18	METR17	Cadmium	3.9	J-	mg/kg	ICSA<LCL	
[REDACTED]	OAZ-0200C-18/24	METR18	Cadmium	0.41	J-	mg/kg	ICSA<LCL	
[REDACTED]	OAZ-0200D-00/06	METR19	Cadmium	2.3	J-	mg/kg	ICSA<LCL	
[REDACTED]	OAZ-0200D-06/12	METR20	Cadmium	3.6	J-	mg/kg	ICSA<LCL	
[REDACTED]	OAZ-0200D-12/18	METR21	Cadmium	2.1	J-	mg/kg	ICSA<LCL	
[REDACTED]	OAZ-0200D-18/24	METR22	Cadmium	0.65	J-	mg/kg	ICSA<LCL	
[REDACTED]	OAZ-0201A-00/06	METR23	Cadmium	2.3	J-	mg/kg	ICSA<LCL	
[REDACTED]	OAZ-0201A-06/12	METR24	Cadmium	5	J-	mg/kg	ICSA<LCL	
[REDACTED]	OAZ-0201A-12/18	METR25	Cadmium	4.5	J-	mg/kg	ICSA<LCL	

**Table 2. Data Qualification Summary**  
*Old American Zinc Superfund Site, Fairmont City, Illinois*

Address	Location ID	Sample ID	Analyte	Final Result	Units	Validation	
						Flag	Validation Reasons
[REDACTED]	OAZ-0201A-18/24	METR26	Cadmium	0.21	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0201A-18/24R	METR27	Cadmium	0.58	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0203C-00/06	METR28	Cadmium	4	J+	mg/kg	ICSA>UCL
[REDACTED]	OAZ-0203C-06/12	METR29	Cadmium	3.3	J+	mg/kg	ICSA>UCL
[REDACTED]	OAZ-0203C-12/18	METR30	Cadmium	1.9	J+	mg/kg	ICSA>UCL
[REDACTED]	OAZ-0203C-18/24	METR31	Cadmium	3.6	J+	mg/kg	ICSA>UCL
[REDACTED]	OAZ-0203D-00/06	METR32	Cadmium	2.7	J+	mg/kg	ICSA>UCL
[REDACTED]	OAZ-0203D-06/12	METR33	Cadmium	2.5	J+	mg/kg	ICSA>UCL
[REDACTED]	OAZ-0203D-12/18	METR34	Cadmium	1.5	J+	mg/kg	ICSA>UCL
[REDACTED]	OAZ-0203D-18/24	METR35	Cadmium	0.77	J+	mg/kg	ICSA>UCL
[REDACTED]	OAZ-0256A-00/06	METR36	Cadmium	7.6	J+	mg/kg	ICSA>UCL
[REDACTED]	OAZ-0256A-06/12	METR37	Cadmium	5	J+	mg/kg	ICSA>UCL
[REDACTED]	OAZ-0256A-06/12R	METR38	Cadmium	5.1	J+	mg/kg	ICSA>UCL
[REDACTED]	OAZ-0256A-12/18	METR39	Cadmium	2.8	J+	mg/kg	ICSA>UCL
[REDACTED]	OAZ-0256B-00/06	METR41	Cadmium	7.9	J+	mg/kg	ICSA>UCL
[REDACTED]	OAZ-0256B-06/12	METR42	Cadmium	3.5	J+	mg/kg	ICSA>UCL
[REDACTED]	OAZ-0256B-12/18	METR43	Cadmium	1.6	J+	mg/kg	ICSA>UCL
[REDACTED]	OAZ-0256B-18/24	METR44	Cadmium	0.43	J+	mg/kg	ICSA>UCL
[REDACTED]	OAZ-0256C-00/06	METR45	Cadmium	3.7	J+	mg/kg	ICSA>UCL
[REDACTED]	OAZ-0256C-06/12	METR46	Cadmium	1.8	J+	mg/kg	ICSA>UCL

**Table 2. Data Qualification Summary**  
*Old American Zinc Superfund Site, Fairmont City, Illinois*

Address	Location ID	Sample ID	Analyte	Final Result	Units	Validation		Validation Reasons
						Flag	Reason	
[REDACTED]	OAZ-0256C-12/18	METR47	Cadmium	0.75	J+	mg/kg	ICSA>UCL	
[REDACTED]	OAZ-0256C-18/24	METR48	Lead	15	J	mg/kg	FD>RPD	
[REDACTED]	OAZ-0256C-18/24R	METR49	Lead	38.4	J	mg/kg	FD>RPD	
[REDACTED]	OAZ-0256C-18/24R	METR49	Cadmium	0.94	J+	mg/kg	ICSA>UCL	
[REDACTED]	OAZ-0256D-00/06	METR50	Cadmium	6.9	J+	mg/kg	ICSA>UCL	
[REDACTED]	OAZ-0201B-00/06	METR51	Cadmium	2.7	J+	mg/kg	ICSA>UCL	
[REDACTED]	OAZ-0201B-06/12	METR52	Cadmium	3.9	J+	mg/kg	ICSA>UCL	
[REDACTED]	OAZ-0201B-12/18	METR53	Cadmium	2.5	J+	mg/kg	ICSA>UCL	
[REDACTED]	OAZ-0201B-18/24	METR54	Cadmium	1.8	J+	mg/kg	ICSA>UCL	
[REDACTED]	OAZ-0201C-00/06	METR55	Cadmium	1.6	J+	mg/kg	ICSA>UCL	
[REDACTED]	OAZ-0201C-06/12	METR56	Cadmium	4.4	J+	mg/kg	ICSA>UCL	
[REDACTED]	OAZ-0201C-12/18	METR57	Cadmium	4.1	J+	mg/kg	ICSA>UCL	
[REDACTED]	OAZ-0201C-18/24	METR58	Cadmium	1.9	J+	mg/kg	ICSA>UCL	
[REDACTED]	OAZ-0201D-00/06	METR59	Cadmium	1.7	J+	mg/kg	ICSA>UCL	
[REDACTED]	OAZ-0201D-06/12	METR60	Lead	22	J	mg/kg	FD>RPD	
[REDACTED]	OAZ-0201D-06/12	METR60	Cadmium	2.4	J+	mg/kg	ICSA>UCL	
[REDACTED]	OAZ-0201D-06/12	METR60	Zinc	135	J	mg/kg	FD>RPD	
[REDACTED]	OAZ-0201D-06/12R	METR61	Lead	49.4	J	mg/kg	FD>RPD	
[REDACTED]	OAZ-0201D-06/12R	METR61	Cadmium	3.5	J+	mg/kg	ICSA>UCL	
[REDACTED]	OAZ-0201D-06/12R	METR61	Zinc	234	J	mg/kg	FD>RPD	

**Table 2. Data Qualification Summary**  
*Old American Zinc Superfund Site, Fairmont City, Illinois*

Address	Location ID	Sample ID	Analyte	Final Result	Units	Validation	
						Flag	Validation Reasons
[REDACTED]	OAZ-0201D-12/18	METR62	Cadmium	2.7	J+	mg/kg	ICSA>UCL
[REDACTED]	OAZ-0201D-18/24	METR63	Cadmium	1.5	J+	mg/kg	ICSA>UCL
[REDACTED]	OAZ-0203A-00/06	METR64	Cadmium	3.4	J+	mg/kg	ICSA>UCL
[REDACTED]	OAZ-0203A-06/12	METR65	Cadmium	4	J+	mg/kg	ICSA>UCL
[REDACTED]	OAZ-0203A-12/18	METR66	Cadmium	4.2	J+	mg/kg	ICSA>UCL
[REDACTED]	OAZ-0203A-18/24	METR67	Cadmium	1.1	J+	mg/kg	ICSA>UCL
[REDACTED]	OAZ-0203B-00/06	METR68	Cadmium	3.7	J+	mg/kg	ICSA>UCL
[REDACTED]	OAZ-0203B-06/12	METR69	Cadmium	4.8	J+	mg/kg	ICSA>UCL
[REDACTED]	OAZ-0203B-12/18	METR70	Cadmium	2.4	J+	mg/kg	ICSA>UCL
[REDACTED]	OAZ-0203B-18/24	METR71	Lead	25.8	J	mg/kg	FD>RPD
[REDACTED]	OAZ-0203B-18/24	METR71	Cadmium	1.7	J+	mg/kg	ICSA>UCL
[REDACTED]	OAZ-0203B-18/24	METR71	Zinc	183	J	mg/kg	FD>RPD
[REDACTED]	OAZ-0203B-18/24R	METR72	Lead	15.2	J	mg/kg	FD>RPD
[REDACTED]	OAZ-0203B-18/24R	METR72	Cadmium	0.44	J+	mg/kg	ICSA>UCL
[REDACTED]	OAZ-0203B-18/24R	METR72	Zinc	86.3	J	mg/kg	FD>RPD
[REDACTED]	OAZ-0255D-00/06	METR94	Cadmium	7	J	mg/kg	FD>RPD
[REDACTED]	OAZ-0255D-00/06R	METR95	Cadmium	3.5	J	mg/kg	FD>RPD
[REDACTED]	OAZ-0084B-12/18	METRC8	Lead	103	J	mg/kg	FD>RPD
[REDACTED]	OAZ-0084B-12/18R	METRC9	Lead	31.3	J	mg/kg	FD>RPD
[REDACTED]	OAZ-0008C-06/12	METREO	Lead	82.2	J	mg/kg	FD>RPD, MS<LCL (J-)

**Table 2. Data Qualification Summary**  
*Old American Zinc Superfund Site, Fairmont City, Illinois*

Address	Location ID	Sample ID	Analyte	Final Result	Units	Validation	
						Flag	Validation Reasons
[REDACTED]	OAZ-0008C-06/12	METREO	Cadmium	7	J	mg/kg	FD>RPD
[REDACTED]	OAZ-0008C-06/12	METREO	Zinc	428	J	mg/kg	FD>RPD
[REDACTED]	OAZ-0008C-06/12R	METRE1	Lead	180	J	mg/kg	FD>RPD
[REDACTED]	OAZ-0008C-06/12R	METRE1	Cadmium	17.8	J	mg/kg	FD>RPD
[REDACTED]	OAZ-0008C-06/12R	METRE1	Zinc	911	J	mg/kg	FD>RPD
[REDACTED]	OAZ-0427C-06/12	METRF1	Cadmium	2.7	J	mg/kg	FD>RPD
[REDACTED]	OAZ-0427C-06/12	METRF1	Zinc	222	J	mg/kg	FD>RPD
[REDACTED]	OAZ-0427C-06/12R	METRF2	Cadmium	6.8	J	mg/kg	FD>RPD
[REDACTED]	OAZ-0427C-06/12R	METRF2	Zinc	461	J	mg/kg	FD>RPD
[REDACTED]	OAZ-0427C-18/24	METRF5	Lead	407	J	mg/kg	FD>RPD
[REDACTED]	OAZ-0427C-18/24	METRF5	Arsenic	24.5	J	mg/kg	FD>RPD
[REDACTED]	OAZ-0427C-18/24	METRF5	Cadmium	58.2	J	mg/kg	FD>RPD
[REDACTED]	OAZ-0427C-18/24	METRF5	Zinc	1870	J	mg/kg	FD>RPD
[REDACTED]	OAZ-0427C-18/24R	METRF6	Lead	64.2	J	mg/kg	FD>RPD
[REDACTED]	OAZ-0427C-18/24R	METRF6	Arsenic	8.2	J	mg/kg	FD>RPD
[REDACTED]	OAZ-0427C-18/24R	METRF6	Cadmium	3.6	J	mg/kg	FD>RPD
[REDACTED]	OAZ-0427C-18/24R	METRF6	Zinc	287	J	mg/kg	FD>RPD
[REDACTED]	OAZ-0893C-18/24	METRH3	Cadmium	3.2	J	mg/kg	FD>RPD
[REDACTED]	OAZ-0893C-18/24R	METRH4	Cadmium	6.8	J	mg/kg	FD>RPD
[REDACTED]	OAZ-0793B-12/18	METRJ5	Lead	13.7	J	mg/kg	LabDupRPD

**Table 2. Data Qualification Summary**  
*Old American Zinc Superfund Site, Fairmont City, Illinois*

Address	Location ID	Sample ID	Analyte	Final Result	Units	Validation	
						Flag	Validation Reasons
[REDACTED]	OAZ-0793B-12/18	METRJ5	Arsenic	6.4	J	mg/kg	LabDupRPD
[REDACTED]	OAZ-0793B-12/18	METRJ5	Zinc	82.3	J	mg/kg	LabDupRPD
[REDACTED]	OAZ-0047D-00/06	METRK6	Cadmium	23.4	J	mg/kg	FD>RPD
[REDACTED]	OAZ-0047D-00/06R	METRK7	Cadmium	11.1	J	mg/kg	FD>RPD
[REDACTED]	OAZ-1000B-18/24	METRL8	Cadmium	0.75	J	mg/kg	LabDupRPD
[REDACTED]	OAZ-0815A-12/18R	METRM0	Lead	36.4	J	mg/kg	FD>RPD
[REDACTED]	OAZ-0815A-12/18R	METRM0	Cadmium	4.7	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0815A-18/24	METRM1	Cadmium	3.7	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0815B-00/06	METRM2	Cadmium	14.1	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0815B-00/06R	METRM3	Cadmium	13.7	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0815B-06/12	METRM4	Cadmium	8.3	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0815B-12/18	METRM5	Cadmium	0.71	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0815B-12/18R	METRM6	Cadmium	1.1	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0815B-18/24	METRM7	Lead	30.1	J	mg/kg	SDIL
[REDACTED]	OAZ-0815B-18/24	METRM7	Cadmium	1.7	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0815C-00/06	METRM8	Cadmium	3.7	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0815C-06/12	METRM9	Cadmium	10.6	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0815C-12/18	METRN0	Cadmium	2.8	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0815C-18/24	METRN1	Cadmium	0.69	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0815D-00/06	METRN2	Cadmium	8.1	J-	mg/kg	ICSA<LCL

**Table 2. Data Qualification Summary**  
*Old American Zinc Superfund Site, Fairmont City, Illinois*

Address	Location ID	Sample ID	Analyte	Final Result	Units	Validation	
						Flag	Validation Reasons
[REDACTED]	OAZ-0815D-06/12	METRN3	Lead	132	J	mg/kg	FD>RPD, SDIL
[REDACTED]	OAZ-0815D-06/12	METRN3	Cadmium	10.9	J	mg/kg	FD>RPD, MS<LCL, SDIL
[REDACTED]	OAZ-0815D-06/12	METRN3	Zinc	532	J	mg/kg	FD>RPD
[REDACTED]	OAZ-0815D-06/12R	METRN4	Lead	49.3	J	mg/kg	FD>RPD
[REDACTED]	OAZ-0815D-06/12R	METRN4	Cadmium	5.1	J	mg/kg	FD>RPD
[REDACTED]	OAZ-0815D-06/12R	METRN4	Zinc	298	J	mg/kg	FD>RPD
[REDACTED]	OAZ-0069B-00/06	METRN6	Lead	198	J	mg/kg	LabDupRPD
[REDACTED]	OAZ-0069B-00/06	METRN6	Arsenic	13.2	J	mg/kg	LabDupRPD, MS<LCL (J-)
[REDACTED]	OAZ-0069B-00/06	METRN6	Cadmium	8.9	J	mg/kg	LabDupRPD, MS<LCL (J-)
[REDACTED]	OAZ-0069B-00/06	METRN6	Zinc	2540	J	mg/kg	LabDupRPD
[REDACTED]	OAZ-0131C-12/18	METRQ6	Lead	20.4	J	mg/kg	LabDupRPD
[REDACTED]	OAZ-1012A-06/12R	METS57	Lead	36.8	J	mg/kg	FD>RPD
[REDACTED]	OAZ-1012A-06/12R	METS57	Cadmium	5.1	J	mg/kg	FD>RPD
[REDACTED]	OAZ-1012A-06/12R	METS57	Zinc	314	J	mg/kg	FD>RPD
[REDACTED]	OAZ-1012A-06/12	METS58	Lead	50.2	J	mg/kg	FD>RPD
[REDACTED]	OAZ-1012A-06/12	METS58	Cadmium	7.4	J	mg/kg	FD>RPD
[REDACTED]	OAZ-1012A-06/12	METS58	Zinc	432	J	mg/kg	FD>RPD
[REDACTED]	OAZ-1012C-18/24	METS68	Zinc	112	J	mg/kg	FD>RPD
[REDACTED]	OAZ-1012C-18/24R	METS69	Zinc	79.6	J	mg/kg	FD>RPD
[REDACTED]	OAZ-1011B-12/18	METS80	Lead	31.9	J	mg/kg	Fd>RPD

**Table 2. Data Qualification Summary**  
*Old American Zinc Superfund Site, Fairmont City, Illinois*

Address	Location ID	Sample ID	Analyte	Final Result	Units	Validation		Validation Reasons
						Flag	Reason	
[REDACTED]	OAZ-1011B-12/18	METS80	Cadmium	4.6	J	mg/kg	FD>RPD	
[REDACTED]	OAZ-1011B-12/18R	METS81	Lead	21.9	J	mg/kg	FD>RPD	
[REDACTED]	OAZ-1011B-12/18R	METS81	Cadmium	3.5	j	mg/kg	FD>RPD	
[REDACTED]	OAZ-1033F-00/06	METS91	Lead	70.3	J	mg/kg	FD>RPD	
[REDACTED]	OAZ-1033F-00/06	METS91	Cadmium	3.7	J	mg/kg	FD>RPD	
[REDACTED]	OAZ-1033F-00/06	METS91	Zinc	358	J	mg/kg	FD>RPD	
[REDACTED]	OAZ-1033F-00/06R	METS92	Lead	242	J	mg/kg	FD>RPD	
[REDACTED]	OAZ-1033F-00/06R	METS92	Cadmium	10	J	mg/kg	FD>RPD	
[REDACTED]	OAZ-1033F-00/06R	METS92	Zinc	890	J	mg/kg	FD>RPD	
[REDACTED]	OAZ-1033B-00/06	METS96	Cadmium	3.1	J+	mg/kg	ICSA>UCL	
[REDACTED]	OAZ-1033B-06/12	METS97	Cadmium	2.9	J+	mg/kg	ICSA>UCL	
[REDACTED]	OAZ-1033B-12/18	METS98	Cadmium	3.6	J+	mg/kg	ICSA>UCL	
[REDACTED]	OAZ-1033B-18/24	METS99	Cadmium	5.3	J+	mg/kg	ICSA>UCL	
[REDACTED]	OAZ-1018A-00/06	METSA0	Cadmium	10.5	J+	mg/kg	ICSA>UCL	
[REDACTED]	OAZ-1018A-06/12	METSA1	Cadmium	8.8	J+	mg/kg	ICSA>UCL	
[REDACTED]	OAZ-1018A-12/18	METSA2	Cadmium	4.6	J+	mg/kg	ICSA>UCL	
[REDACTED]	OAZ-1018A-18/24	METSA3	Lead	20.4	J-	mg/kg	MS<LCL	
[REDACTED]	OAZ-1018A-18/24	METSA3	Cadmium	0.91	J+	mg/kg	ICSA>UCL	
[REDACTED]	OAZ-1018A-18/24R	METSA4	Cadmium	1	J+	mg/kg	ICSA>UCL	
[REDACTED]	OAZ-0917A-12/18	METSB4	Lead	27	J	mg/kg	FD>RPD	

**Table 2. Data Qualification Summary**  
*Old American Zinc Superfund Site, Fairmont City, Illinois*

Address	Location ID	Sample ID	Analyte	Final Result	Units	Validation	
						Flag	Validation Reasons
[REDACTED]	OAZ-0917A-12/18	METSB4	Arsenic	9.2	J	mg/kg	FD>RPD
[REDACTED]	OAZ-0917A-12/18	METSB4	Cadmium	8.1	J	mg/kg	FD>RPD
[REDACTED]	OAZ-0917A-12/18R	METSB5	Lead	55	J	mg/kg	FD>RPD
[REDACTED]	OAZ-0917A-12/18R	METSB5	Arsenic	15.3	J	mg/kg	FD>RPD
[REDACTED]	OAZ-0917A-12/18R	METSB5	Cadmium	10.1	J	mg/kg	FD>RPD
[REDACTED]	OAZ-0917D-06/12	METSC6	Cadmium	12.5	J	mg/kg	SDIL
[REDACTED]	OAZ-1030A-12/18	METSE9	Lead	72.5	J	mg/kg	FD>RPD
[REDACTED]	OAZ-1030A-12/18R	METSF0	Lead	30.7	J	mg/kg	FD>RPD
[REDACTED]	OAZ-1018D-06/12	METSG0	Lead	59.3	J	mg/kg	FD>RPD
[REDACTED]	OAZ-1018D-06/12	METSG0	Cadmium	7.5	J	mg/kg	FD>RPD
[REDACTED]	OAZ-1018D-06/12	METSG0	Zinc	431	J	mg/kg	FD>RPD
[REDACTED]	OAZ-1018D-06/12R	METSG1	Lead	18.8	J	mg/kg	FD>RPD
[REDACTED] D	OAZ-1018D-06/12R	METSG1	Cadmium	1.6	J	mg/kg	FD>RPD
[REDACTED]	OAZ-1018D-06/12R	METSG1	Zinc	130	J	mg/kg	FD>RPD
[REDACTED]	OAZ-1019C-00/06	METSH2	Arsenic	7.2	J	mg/kg	SDIL
[REDACTED]	OAZ-0008D-06/12	METSH7	Arsenic	11.5	J-	mg/kg	MS<LCL
[REDACTED]	OAZ-0008D-06/12	METSH7	Cadmium	19.4	J-	mg/kg	MS<LCL
[REDACTED]	OAZ-0008D-06/12	METSH7	Zinc	777	J	mg/kg	SDIL
[REDACTED]	OAZ-0008D-06/12	METSH7	Lead	251	J	mg/kg	LABDupRPD
[REDACTED]	OAZ-0011A-18/24	METSJ3	Cadmium	1.8	J	mg/kg	FD>RPD

**Table 2. Data Qualification Summary**  
*Old American Zinc Superfund Site, Fairmont City, Illinois*

Address	Location ID	Sample ID	Analyte	Final Result	Units	Validation		Validation Reasons
						Flag	Reason	
[REDACTED]	OAZ-0011A-18/24R	METSJ4	Cadmium	7.2	J	mg/kg	FD>RPD	
[REDACTED]	OAZ-0011D-12/18R	METSK5	Zinc	427	J+	mg/kg	MS>UCL	
[REDACTED]	OAZ-0011D-12/18	METSK6	Lead	24	J	mg/kg	LabDupRPD	
[REDACTED]	OAZ-0011D-12/18	METSK6	Arsenic	7.7	J	mg/kg	LabDupRPD	
[REDACTED]	OAZ-0011D-12/18	METSK6	Cadmium	2.1	J	mg/kg	LabDupRPD	
[REDACTED]	OAZ-0011D-12/18	METSK6	Zinc	315	J	mg/kg	LabDupRPD, MS>UCL (J+)	
[REDACTED]	OAZ-0108B-00/06	METSM4	Cadmium	6.1	J-	mg/kg	ICSA<LCL	
[REDACTED]	OAZ-0108B-06/12	METSM5	Cadmium	4.1	J-	mg/kg	ICSA<LCL	
[REDACTED]	OAZ-0108B-12/18	METSM6	Cadmium	1.7	J-	mg/kg	ICSA<LCL	
[REDACTED]	OAZ-0108B-18/24	METSM7	Cadmium	0.89	J-	mg/kg	ICSA<LCL	
[REDACTED]	OAZ-0108C-00/06	METSM8	Cadmium	4.5	J-	mg/kg	ICSA<LCL	
[REDACTED]	OAZ-0108C-00/06	METSM8	Zinc	455	J-	mg/kg	MS<LCL	
[REDACTED]	OAZ-0108C-00/06R	METSM9	Cadmium	4.7	J-	mg/kg	ICSA<LCL	
[REDACTED]	OAZ-0108C-00/06R	METSM9	Zinc	431	J-	mg/kg	MS<LCL	
[REDACTED]	OAZ-0306D-12/18	METSN0	Cadmium	2.4	J-	mg/kg	ICSA<LCL	
[REDACTED]	OAZ-0306D-18/24	METSN1	Cadmium	0.51	J-	mg/kg	ICSA<LCL	
[REDACTED]	OAZ-0565F-00/06	METSN2	Cadmium	3.1	J-	mg/kg	ICSA<LCL	
[REDACTED]	OAZ-0565F-06/12	METSN3	Cadmium	0.84	J-	mg/kg	ICSA<LCL	
[REDACTED]	OAZ-0565F-12/18	METSN4	Cadmium	0.48	J-	mg/kg	ICSA<LCL	
[REDACTED]	OAZ-0565F-18/24	METSN5	Cadmium	1.3	J-	mg/kg	ICSA<LCL	

**Table 2. Data Qualification Summary**  
*Old American Zinc Superfund Site, Fairmont City, Illinois*

Address	Location ID	Sample ID	Analyte	Final Result	Units	Validation		Validation Reasons
						Flag	Reason	
[REDACTED]	OAZ-0565M-00/06	METSN6	Cadmium	8.3	J-	mg/kg	ICSA<LCL	
[REDACTED]	OAZ-0565M-06/12	METSN7	Cadmium	5.5	J-	mg/kg	ICSA<LCL	
[REDACTED]	OAZ-0565M-12/18	METSN8	Cadmium	5.7	J-	mg/kg	ICSA<LCL	
[REDACTED]	OAZ-0565M-18/24	METSN9	Lead	18.8	J	mg/kg	FD>RPD	
[REDACTED]	OAZ-0565M-18/24	METSN9	Cadmium	1.3	J-	mg/kg	ICSA<LCL	
[REDACTED]	OAZ-0565M-18/24	METSN9	Zinc	272	J	mg/kg	FD>RPD	
[REDACTED]	OAZ-0565M-18/24R	METSP0	Lead	33.2	J	mg/kg	FD>RPD	
[REDACTED]	OAZ-0565M-18/24R	METSP0	Cadmium	1.2	J-	mg/kg	ICSA<LCL	
[REDACTED]	OAZ-0565M-18/24R	METSP0	Zinc	142	J	mg/kg	FD>RPD	
[REDACTED]	OAZ-0565B-00/06	METSP1	Cadmium	9.5	J-	mg/kg	ICSA<LCL	
[REDACTED]	OAZ-0565B-06/12	METSP2	Cadmium	4.9	J-	mg/kg	ICSA<LCL	
[REDACTED]	OAZ-0565B-12/18	METSP3	Cadmium	0.76	J-	mg/kg	ICSA<LCL	
[REDACTED]	OAZ-0565B-18/24	METSP4	Cadmium	1.2	J-	mg/kg	ICSA<LCL	
[REDACTED]	OAZ-0915A-00/06	METSP5	Cadmium	12.2	J-	mg/kg	ICSA<LCL	
[REDACTED]	OAZ-0915A-06/12	METSP6	Cadmium	17.3	J-	mg/kg	ICSA<LCL	
[REDACTED]	OAZ-0915A-12/18	METSP7	Cadmium	9.5	J-	mg/kg	ICSA<LCL	
[REDACTED]	OAZ-0915A-18/24	METSP8	Cadmium	0.92	J-	mg/kg	ICSA<LCL	
[REDACTED]	OAZ-0915B-00/06	METSP9	Cadmium	16.8	J-	mg/kg	ICSA<LCL	
[REDACTED]	OAZ-0915B-06/12	METSQ0	Cadmium	13.8	J-	mg/kg	ICSA<LCL	
[REDACTED]	OAZ-0915B-12/18	METSQ1	Lead	30.8	J	mg/kg	FD>RPD, LabDupRPD	

**Table 2. Data Qualification Summary**  
*Old American Zinc Superfund Site, Fairmont City, Illinois*

Address	Location ID	Sample ID	Analyte	Final Result	Units	Validation Flag	Validation Reasons
[REDACTED]	OAZ-0915B-12/18	METSQ1	Cadmium	2.9	J	mg/kg	FD>RDP, LabDupRPD, ICSA<LCL (J-)
[REDACTED]	OAZ-0915B-12/18	METSQ1	Zinc	289	J-	mg/kg	MS<LCL
[REDACTED]	OAZ-0915B-12/18R	METSQ2	Lead	26.9	J	mg/kg	FD>RPD, LabDupRPD
[REDACTED]	OAZ-0915B-12/18R	METSQ2	Cadmium	1.8	J	mg/kg	FD>RDP, LabDupRPD, ICSA<LCL (J-)
[REDACTED]	OAZ-0915B-12/18R	METSQ2	Zinc	205	J-	mg/kg	MS<LCL
[REDACTED]	OAZ-0108C-06/12	METSQ3	Cadmium	3.7	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0108C-12/18	METSQ4	Cadmium	1.4	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0108C-18/24	METSQ5	Cadmium	1.5	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0108D-00/06	METSQ6	Cadmium	3.8	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0108D-06/12	METSQ7	Cadmium	2.7	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0108D-12/18	METSQ8	Cadmium	1.7	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0108D-18/24	METSQ9	Cadmium	1.2	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0306A-00/06	METSR0	Cadmium	3.1	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0306A-06/12	METSR1	Cadmium	2.4	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0306A-12/18	METSR2	Cadmium	6.9	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0306A-12/18R	METSR3	Cadmium	4	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0306D-06/12	METSS4	Lead	224	J	mg/kg	LabDupRPD, SDIL, FD>RPD
[REDACTED]	OAZ-0306D-06/12	METSS4	Arsenic	11.3	J	mg/kg	SDIL
[REDACTED]	OAZ-0306D-06/12	METSS4	Cadmium	3.8	J	mg/kg	LabDupRPD, SDIL, FD>RPD

**Table 2. Data Qualification Summary**  
*Old American Zinc Superfund Site, Fairmont City, Illinois*

Address	Location ID	Sample ID	Analyte	Final Result	Units	Validation	
						Flag	Validation Reasons
[REDACTED]	OAZ-0306D-06/12	METSS4	Zinc	413	J	mg/kg	SDIL, FD>RPD
[REDACTED]	OAZ-0306D-06/12R	METSS5	Lead	294	J	mg/kg	FD>RPD
[REDACTED]	OAZ-0306D-06/12R	METSS5	Cadmium	5.6	J	mg/kg	FD>RPD
[REDACTED]	OAZ-0306D-06/12R	METSS5	Zinc	523	J	mg/kg	FD>RPD
[REDACTED]	OAZ-0021B-18/24	METST4	Cadmium	8.4	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0072A-00/06	METST5	Cadmium	5.7	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0072A-00/06R	METST6	Cadmium	7.7	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0072A-06/12	METST7	Cadmium	3.6	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0072A-12/18	METST8	Cadmium	1.4	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0072A-18/24	METST9	Cadmium	1	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0072B-00/06	METS0	Cadmium	5.6	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0072B-06/12	METS1	Cadmium	4.2	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0072B-12/18	METS2	Cadmium	0.71	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0072B-18/24	METS3	Cadmium	0.6	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0072C-00/06	METS4	Cadmium	4.1	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0072C-06/12	METS5	Cadmium	3.9	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0072C-12/18	METS6	Cadmium	1.6	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0072C-18/24	METS7	Lead	21.7	J	mg/kg	LabDupRPD
[REDACTED]	OAZ-0072C-18/24	METS7	Arsenic	9.6	J+	mg/kg	MS>UCL
[REDACTED]	OAZ-0072C-18/24	METS7	Cadmium	2.8	J-	mg/kg	ICSA<LCL

**Table 2. Data Qualification Summary**  
*Old American Zinc Superfund Site, Fairmont City, Illinois*

Address	Location ID	Sample ID	Analyte	Final Result	Units	Validation	
						Flag	Validation Reasons
[REDACTED]	OAZ-0072C-18/24	METSW7	Zinc	487	J	mg/kg	FD>RPD, LabDupRPD
[REDACTED]	OAZ-0072C-18/24R	METSW8	Arsenic	8.7	J+	mg/kg	MS>UCL
[REDACTED]	OAZ-0072C-18/24R	METSW8	Cadmium	1.5	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0072C-18/24R	METSW8	Zinc	174	J	mg/kg	FD>RPD
[REDACTED]	OAZ-0915B-18/24	METSW9	Cadmium	11.7	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0915C-00/06	METSX0	Cadmium	20.1	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0915C-06/12	METSX1	Cadmium	16.5	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0915C-12/18	METSX2	Cadmium	14.3	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0915C-18/24	METSX3	Cadmium	2.7	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0915D-00/06	METSX4	Cadmium	31.1	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0915D-06/12	METSX5	Cadmium	3.6	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0915D-12/18	METSX6	Cadmium	20.8	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0915D-18/24	METSX7	Cadmium	0.95	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0915E-00/06	METSX8	Cadmium	23	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0915E-00/06R	METSX9	Cadmium	15.2	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0915E-06/12	METSY0	Cadmium	0.82	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0915E-12/18	METSY1	Cadmium	1.3	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0915E-18/24	METSY2	Cadmium	0.62	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-1054A-00/06	METSY3	Cadmium	0.76	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-1054A-06/12	METSY4	Cadmium	6.4	J-	mg/kg	ICSA<LCL

**Table 2. Data Qualification Summary**  
*Old American Zinc Superfund Site, Fairmont City, Illinois*

Address	Location ID	Sample ID	Analyte	Final Result	Units	Validation		Validation Reasons
						Flag	Reason	
[REDACTED]	OAZ-1054A-12/18	METSY5	Cadmium	5.1	J-	mg/kg	ICSA<LCL	
[REDACTED]	OAZ-1054A-18/24	METSY6	Cadmium	1.6	J-	mg/kg	ICSA<LCL	
[REDACTED]	OAZ-1054B-00/06	METSY7	Cadmium	2.2	J-	mg/kg	ICSA<LCL	
[REDACTED]	OAZ-1054B-06/12	METSY8	Cadmium	0.27	J-	mg/kg	ICSA<LCL	
[REDACTED]	OAZ-1054B-12/18	METSY9	Cadmium	6.5	J-	mg/kg	ICSA<LCL	
[REDACTED]	OAZ-1054B-18/24	METSZ0	Lead	142	J	mg/kg	FD>RPD	
[REDACTED]	OAZ-1054B-18/24	METSZ0	Arsenic	6.5	J	mg/kg	LabDupRPD, MS>UCL (J+)	
[REDACTED]	OAZ-1054B-18/24	METSZ0	Cadmium	3	J	mg/kg	FD>RPD, ICSA<LCL (J-)	
[REDACTED]	OAZ-1054B-18/24R	METSZ1	Lead	241	J	mg/kg	FD>RPD	
[REDACTED]	OAZ-1054B-18/24R	METSZ1	Arsenic	9.2	J	mg/kg	LabDupRPD, MS>UCL (J+)	
[REDACTED]	OAZ-1054B-18/24R	METSZ1	Cadmium	5.1	J	mg/kg	FD>RPD, ICSA<LCL (J-)	
[REDACTED]	OAZ-1054C-00/06	METSZ2	Cadmium	0.87	J-	mg/kg	ICSA<LCL	
[REDACTED]	OAZ-1054C-06/12	METSZ3	Cadmium	0.31	J-	mg/kg	ICSA<LCL	
[REDACTED]	OAZ-1054C-12/18	METSZ4	Cadmium	0.15	J-	mg/kg	ICSA<LCL	
[REDACTED]	OAZ-1054C-18/24	METSZ5	Cadmium	4.4	J-	mg/kg	ICSA<LCL	
[REDACTED]	OAZ-1054D-00/06	METSZ6	Cadmium	4.5	J-	mg/kg	ICSA<LCL	
[REDACTED]	OAZ-1054D-06/12	METSZ7	Cadmium	2.1	J-	mg/kg	ICSA<LCL	
[REDACTED]	OAZ-1054D-12/18	METSZ8	Cadmium	4.4	J-	mg/kg	ICSA<LCL	
[REDACTED]	OAZ-1054D-18/24	METSZ9	Cadmium	0.94	J-	mg/kg	ICSA<LCL	
[REDACTED]	OAZ-0313A-00/06	METT00	Cadmium	4.9	J-	mg/kg	ICSA<LCL	

**Table 2. Data Qualification Summary**  
*Old American Zinc Superfund Site, Fairmont City, Illinois*

Address	Location ID	Sample ID	Analyte	Final Result	Units	Validation	
						Flag	Validation Reasons
[REDACTED]	OAZ-0313A-06/12	METT01	Lead	73	J	mg/kg	FD>RPD
[REDACTED]	OAZ-0313A-06/12	METT01	Arsenic	10.4	J	mg/kg	FD>RPD
[REDACTED]	OAZ-0313A-06/12	METT01	Cadmium	3.5	J	mg/kg	FD>RPD, ICSA<LCL (J-)
[REDACTED]	OAZ-0313A-06/12	METT01	Zinc	353	J	mg/kg	FD>RPD
[REDACTED]	OAZ-0313A-06/12R	METT02	Lead	198	J	mg/kg	FD>RPD
[REDACTED]	OAZ-0313A-06/12R	METT02	Arsenic	27.1	J	mg/kg	FD>RPD
[REDACTED]	OAZ-0313A-06/12R	METT02	Cadmium	8.5	J	mg/kg	FD>RPD, ICSA<LCL (J-)
[REDACTED]	OAZ-0313A-06/12R	METT02	Zinc	689	J	mg/kg	FD>RPD
[REDACTED]	OAZ-0313A-12/18	METT03	Cadmium	2.6	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0313A-18/24	METT04	Cadmium	0.44	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0313B-00/06	METT05	Cadmium	7.6	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0313B-06/12	METT06	Cadmium	3.4	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0313B-12/18	METT07	Cadmium	6.4	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0313B-18/24	METT08	Cadmium	3.8	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0313C-00/06	METT09	Cadmium	7.8	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0313C-06/12	METT10	Cadmium	12.4	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0313C-12/18	METT11	Cadmium	1.4	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0313C-18/24	METT12	Cadmium	0.9	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0313D-00/06	METT13	Arsenic	12.1	J+	mg/kg	MS>UCL
[REDACTED]	OAZ-0313D-00/06	METT13	Cadmium	9.2	J	mg/kg	LabDupRPD, ICSA<LCL (J-)

**Table 2. Data Qualification Summary**  
*Old American Zinc Superfund Site, Fairmont City, Illinois*

Address	Location ID	Sample ID	Analyte	Final Result	Units	Validation	
						Flag	Validation Reasons
[REDACTED]	OAZ-0331F-00/06	METT18	Cadmium	4	J	mg/kg	LabDupRPD
[REDACTED]	OAZ-0027A-06/12	METT36	Lead	151	J	mg/kg	FD>RPD
[REDACTED]	OAZ-0027A-06/12R	METT37	Lead	20.9	J	mg/kg	FD>RPD
[REDACTED]	OAZ-0047A-12/18	METT59	Lead	45.3	J	mg/kg	FD>RPD, SDIL
[REDACTED]	OAZ-0047A-12/18R	METT60	Lead	79.8	J	mg/kg	FD>RPD
[REDACTED]	OAZ-0311B-18/24	METT71	Arsenic	5.2	J	mg/kg	FD>RPD
[REDACTED]	OAZ-0311B-18/24R	METT72	Arsenic	7.1	J	mg/kg	FD>RPD
[REDACTED]	OAZ-0311B-18/24R	METT72	Cadmium	0.47	J-	mg/kg	PB<RL
[REDACTED]	OAZ-0069A-00/06	METT81	Cadmium	4.4	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0069A-06/12	METT82	Cadmium	4.5	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0069A-12/18	METT83	Cadmium	1.5	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0069A-12/18	METT83	Zinc	241	J	mg/kg	SDIL, MS>UCL (J+)
[REDACTED]	OAZ-0069A-12/18R	METT84	Cadmium	1.9	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0311A-12/18	METT85	Cadmium	1.8	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0793B-18/24	METT86	Cadmium	2.7	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0061A-00/06	METT87	Cadmium	5.6	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0061A-06/12	METT88	Cadmium	7.3	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0061A-12/18	METT89	Cadmium	4.5	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0061A-18/24	METT90	Cadmium	0.67	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0061B-00/06	METT91	Cadmium	4.2	J-	mg/kg	ICSA<LCL

**Table 2. Data Qualification Summary**  
*Old American Zinc Superfund Site, Fairmont City, Illinois*

Address	Location ID	Sample ID	Analyte	Final Result	Units	Validation	
						Flag	Validation Reasons
[REDACTED]	OAZ-0061B-06/12	METT92	Cadmium	10.5	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0061B-12/18	METT93	Cadmium	3	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0061B-18/24	METT94	Cadmium	1.7	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0061C-00/06	METT95	Cadmium	6.5	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0061C-00/06R	METT96	Cadmium	9.6	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0061C-06/12	METT97	Cadmium	4.3	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0061C-12/18	METT98	Cadmium	2.9	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0061C-18/24	METT99	Cadmium	2.5	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0061D-00/06	METTA0	Cadmium	7.9	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0061D-06/12	METTA1	Cadmium	2.3	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0061D-12/18	METTA2	Cadmium	5.2	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0061D-18/24	METTA3	Cadmium	3.3	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-1052F-00/06	METTA4	Cadmium	9.6	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-1052F-06/12	METTA5	Cadmium	17	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-1052F-12/18	METTA6	Cadmium	8.1	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-1052F-18/24	METTA7	Cadmium	7	J	mg/kg	SDIL, LabDupRPD, ICSA<LCL (J-)
[REDACTED]	OAZ-1052F-18/24	METTA7	Zinc	453	J+	mg/kg	MS>UCL
[REDACTED]	OAZ-1052F-18/24R	METTA8	Cadmium	9.3	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-1052B-00/06	METTA9	Cadmium	7.5	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-1052B-06/12	METTB0	Cadmium	7.4	J-	mg/kg	ICSA<LCL

**Table 2. Data Qualification Summary**  
*Old American Zinc Superfund Site, Fairmont City, Illinois*

<b>Address</b>	<b>Location ID</b>	<b>Sample ID</b>	<b>Analyte</b>	<b>Final Result</b>	<b>Units</b>	<b>Validation</b>	
						<b>Flag</b>	<b>Validation Reasons</b>
[REDACTED]	OAZ-1052B-12/18	METTB1	Cadmium	2.9	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-1052B-18/24	METTB2	Cadmium	1.3	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0815A-00/06	METTB3	Cadmium	17.1	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0815A-06/12	METTB4	Cadmium	8	J-	mg/kg	ICSA<LCL
[REDACTED]	OAZ-0815A-12/18	METTB5	Lead	63.9	J	mg/kg	FD>RPD
[REDACTED]	OAZ-0815A-12/18	METTB5	Cadmium	5.2	J-	mg/kg	ICSA<LCL

## Validation Reasons:

- FD>RPD                         The RPD between the parent sample and FD exceeded QC criteria.
- ICSA<LCL                         The interference check standard recovered less than criteria.
- ICSA>UCL                         The interference check standard recovered greater than criteria.
- LabDupRPD                         The RPD between the parent sample and laboratory duplicate exceeded QC criteria.
- LB<RL                             The analyte was detected in a method blank at a concentration less than the reporting limit.
- MS>UCL                             The matrix spike recovery was greater than the upper control limit.
- MS<LCL                             The matrix spike recovery was less than the lower control limit.
- SDIL                                 The RPD between the parent sample and serial dilution exceeded method criteria.

## Attachment 2

### Photo Log

OLD AMERICAN ZINC PLANT SUPERFUND SITE, FAIRMONT CITY, ST. CLAIR COUNTY AND MADISON COUNTY, ILLINOIS



*Photo 1 - Utility flags and markings in side yard.*



*Photo 2 – Utility flags and markings.*

ATTACHMENT 2 – PHOTO LOG  
2018 RESIDENTIAL SOIL SAMPLING  
OLD AMERICAN ZINC PLANT SUPERFUND SITE, FAIRMONT CITY, ST. CLAIR COUNTY AND MADISON COUNTY, ILLINOIS



*Photo 3 – Utility flags and markings.*



*Photo 4 – Utility flags and sampling flags, and liners.*

OLD AMERICAN ZINC PLANT SUPERFUND SITE, FAIRMONT CITY, ST. CLAIR COUNTY AND MADISON COUNTY, ILLINOIS



Photo 5 – Utility flags and markings, decontamination equipment, containers.



Photo 6 – Decontamination equipment, containers, fill soil and augers.

ATTACHMENT 2 – PHOTO LOG  
2018 RESIDENTIAL SOIL SAMPLING

OLD AMERICAN ZINC PLANT SUPERFUND SITE, FAIRMONT CITY, ST. CLAIR COUNTY AND MADISON COUNTY, ILLINOIS



Photo 7 – Hand auger staff, sampling flags and utility flags and markings.



Photo 8 – Hand auger staff abandoning sampling points with excess soil.

OLD AMERICAN ZINC PLANT SUPERFUND SITE, FAIRMONT CITY, ST. CLAIR COUNTY AND MADISON COUNTY, ILLINOIS



Photo 9 – Hand auger staff collecting sample aliquots.



Photo 10 – Hand auger staff collecting sample aliquots.

ATTACHMENT 2 – PHOTO LOG  
2018 RESIDENTIAL SOIL SAMPLING

OLD AMERICAN ZINC PLANT SUPERFUND SITE, FAIRMONT CITY, ST. CLAIR COUNTY AND MADISON COUNTY, ILLINOIS



Photo 11 – Hand auger staff performing decontamination.



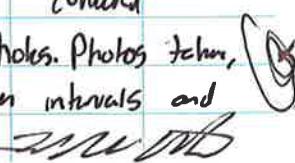
Photo 12 – Sample liners and hand auger staff; decontamination equipment on left.

# Attachment 3

## Field Books

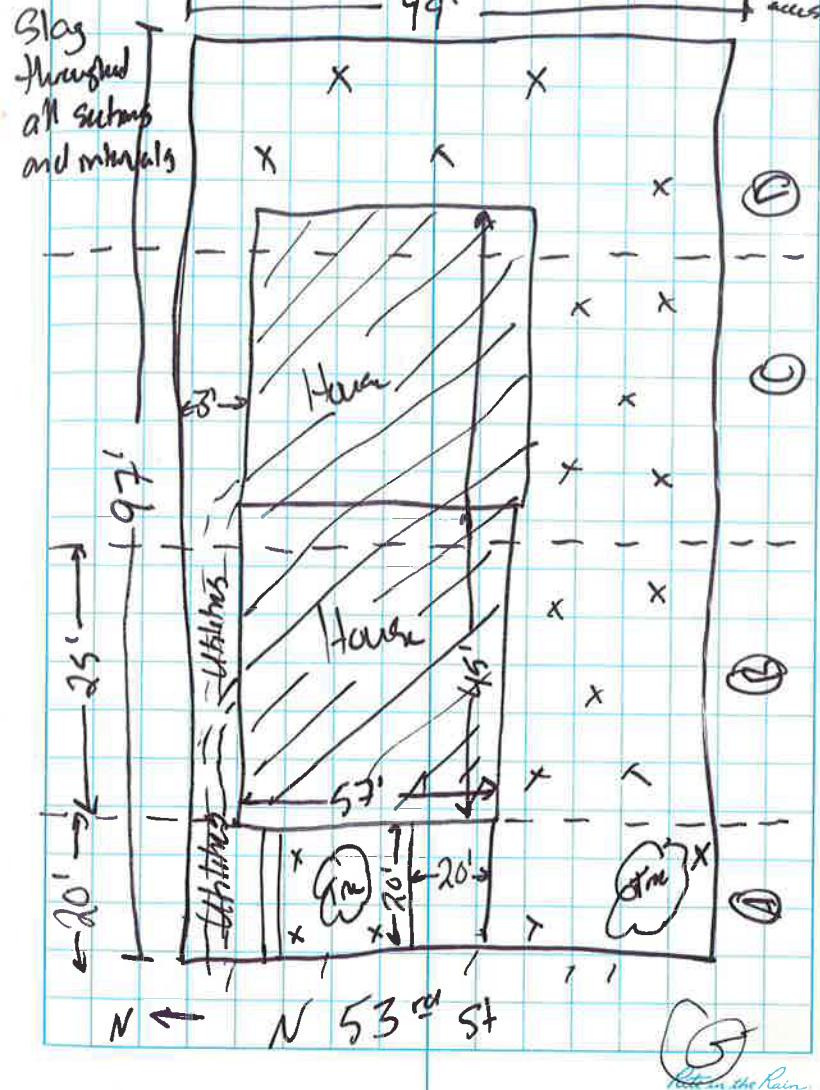
Weather: 70° - 90°, sunny

- 0700 - Safety meeting - Topic is stretching
- 0720 - Depart for sampling; WE using FTL back for PCM duty.
- 0816 - OAZ-0027A-06/16 collected
- 0805 - OAZ-0027A-06/12 collected pencil
- 0808 - OAZ-0027A-D6/12R collected ✓
- 0805 - OAZ-0027A-06/12 MS/MSD collected
- 0810 - OAZ-0027A-12/18 collected
- 0815 - OAZ-0027A-18/24 collected
- 0820 - OAZ-0027B-06/06 collected
- 0825 - OAZ-0027B-06/12 collected
- 0830 - OAZ-0027B-12/18 collected
- 0835 - OAZ-0027B-18/24 collected
- 0840 - OAZ-0027C-06/06 collected
- 0845 - OAZ-0027C-06/12 collected
- 0850 - OAZ-0027C-12/18 collected
- 0855 - OAZ-0027C-18/24 collected pencil
- 0858 - OAZ-0027C-18/24R collected
- 0906 - OAZ-0027D-06/06 collected
- 0905 - OAZ-0027D-06/12 collected
- 0910 - OAZ-0027D-12/18 collected
- 0915 - OAZ-0027D-18/24 collected

Excess soil returned to aliquot sample holes. Photos taken, flags pulled. Auger cleaned between intervals and yard areas per POP. — 

0027-

Auto woods in back, only 97' of 131' of parcel maintained and accessible



112 Location East St. Louis  
Project / Client OAZ/EPA

Date 9/16/19

Backyard is completely unsampleable due to excessive junk.

44' x 30' Sampleable Area  $\Rightarrow$  F only

0930 - OAZ-0041 F - 08106 collected

0935 - OAZ-0041 F - 08112 collected

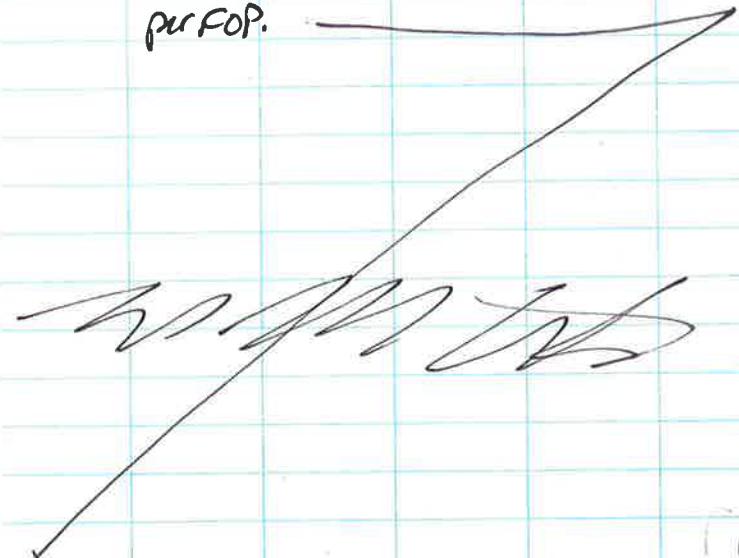
0940 - OAZ-0041 F - 12118 collected

0945 - OAZ-0041 F - 18124 collected

Slag throughout, all intervals.

Excess soil returned to a aliquot sample holes. Photos taken, flags pulled,

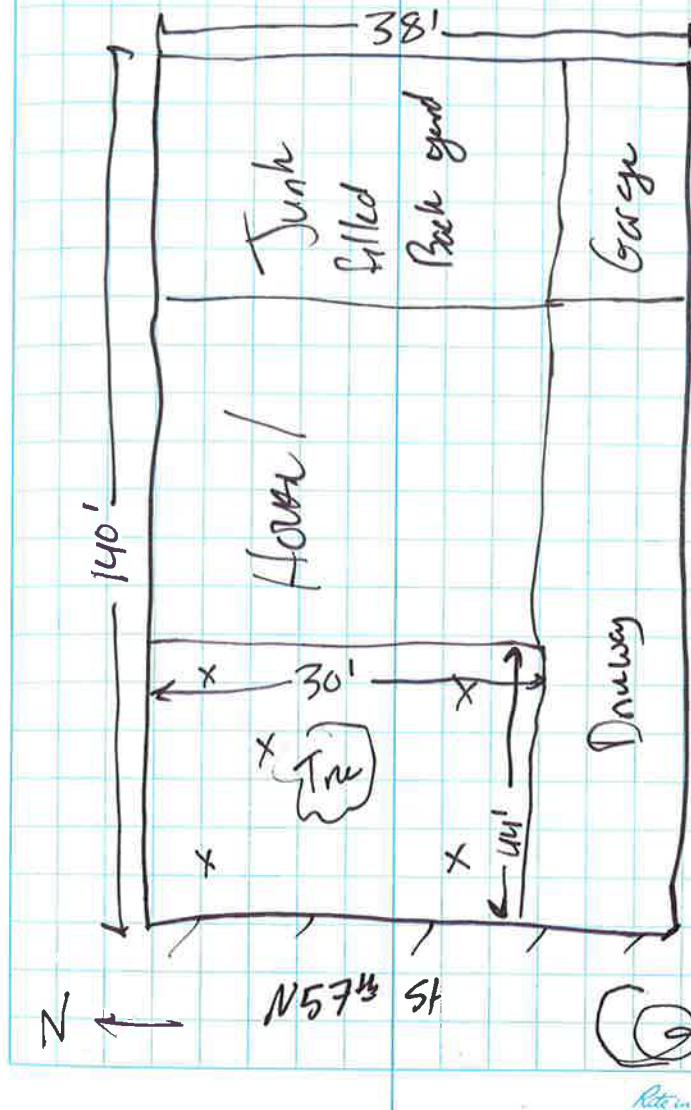
Augers cleaned ~~before~~ <sup>after</sup> cleaned between intervals and yard areas per FOP.



Location East St. Louis  
Project / Client OAZ/EPA

Date 9/16/19

0041 - [REDACTED]



114 Location East St. Louis Date 9/16/19  
 Project / Client OAZ/EPA

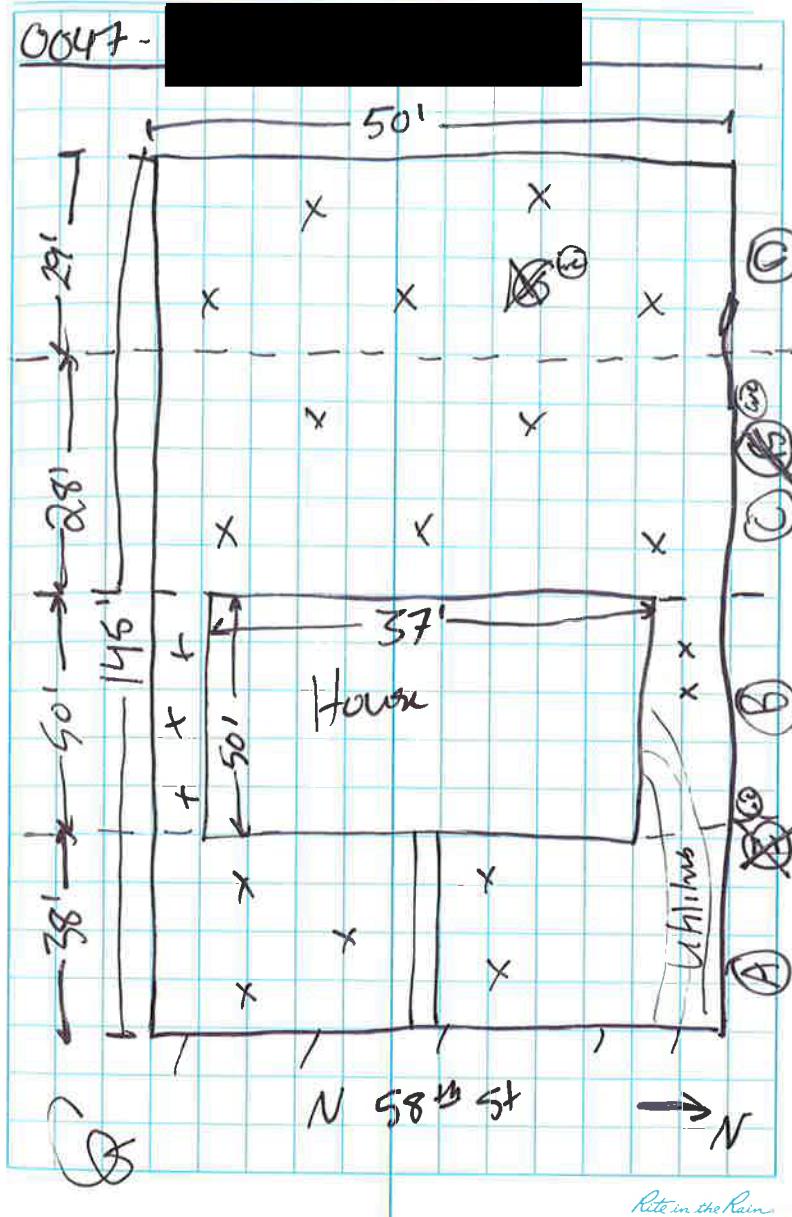
- 7250 ft<sup>2</sup> lot - 1850 ft<sup>2</sup> house  $\Rightarrow > 5000 \text{ ft}^2$   
 $\Rightarrow A, B, C, D$  property
- 1020 - OAZ-0047A-00/06 collected  
 1025 - OAZ-0047A-06/12 collected  
 1030 - OAZ-0047A-12/18 collected (part)  
 1033 - OAZ-0047A-12/18R collected  
 1030 - OAZ-0047A-12/18MS/MSD collected<sup>R</sup>  
 1035 - OAZ-0047A-18/24 collected  
 1040 - OAZ-0047B-00/06 collected  
 1045 - OAZ-0047B-08/12 collected  
 1050 - OAZ-0047B-12/18 collected  
 1055 - OAZ-0047B-18/24 collected  
 1100 - OAZ-0047C-00/06 collected  
 1105 - OAZ-0047C-06/12 collected  
 1110 - OAZ-0047C-12/18 collected  
 1115 - OAZ-0047C-18/24 collected  
 1120 - OAZ-0047D-00/06 collected  
 1123 - OAZ-0047D-00/06R collected  
 1125 - OAZ-0047D-06/12 collected  
 1130 - OAZ-0047D-12/18 collected  
 1135 - OAZ-0047D-18/24 collected

Excess soil returned to a liquor sample hole.

Photos taken, flags pulled.

(C) Auger cleaned between intervals and  
 yard areas per FOP. — 2222222

Location East St. Louis Date 9/16/19  
 Project / Client OAZ/EPA



116 Location East St. LouisProject / Client OAZ/EPADate 9/16/199180 ft<sup>2</sup> lot - 3000 ft<sup>2</sup> house - 840 ft<sup>2</sup> driveway

- 400 ft<sup>2</sup> shed = 1940 ft<sup>2</sup> completable area  
 $\Rightarrow$  F/B property. ~~25000 ft<sup>2</sup>~~ area

1300 - OAZ-1000F-00/06 Collected

1305 - OAZ-1000F-06/12 Collected

1310 - OAZ-1000F-12/18 Collected

1315 - OAZ-1000F-18/24 Collected

1320 - OAZ-1000B-00/06 Collected

1325 - OAZ-1000B-06/12 Collected

1330 - OAZ-1000B-12/18 Collected

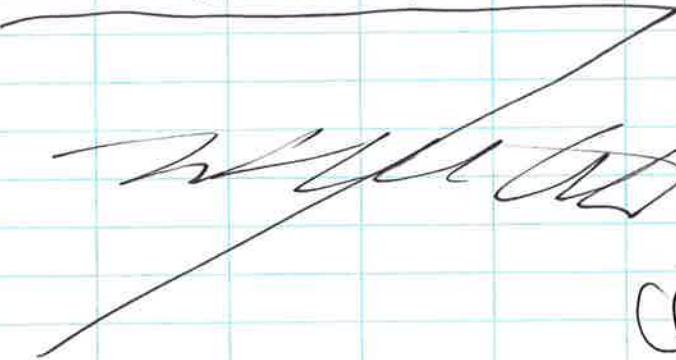
1335 - OAZ-1000B-18/24 Collected pointy

1338 - OAZ-1000B-18/24R Collected ↙

1335 - OAZ-1000B-18/24 MS/MSD Collected

Excess soil returned to aliquot sample holes. Photos taken, flags pulled.

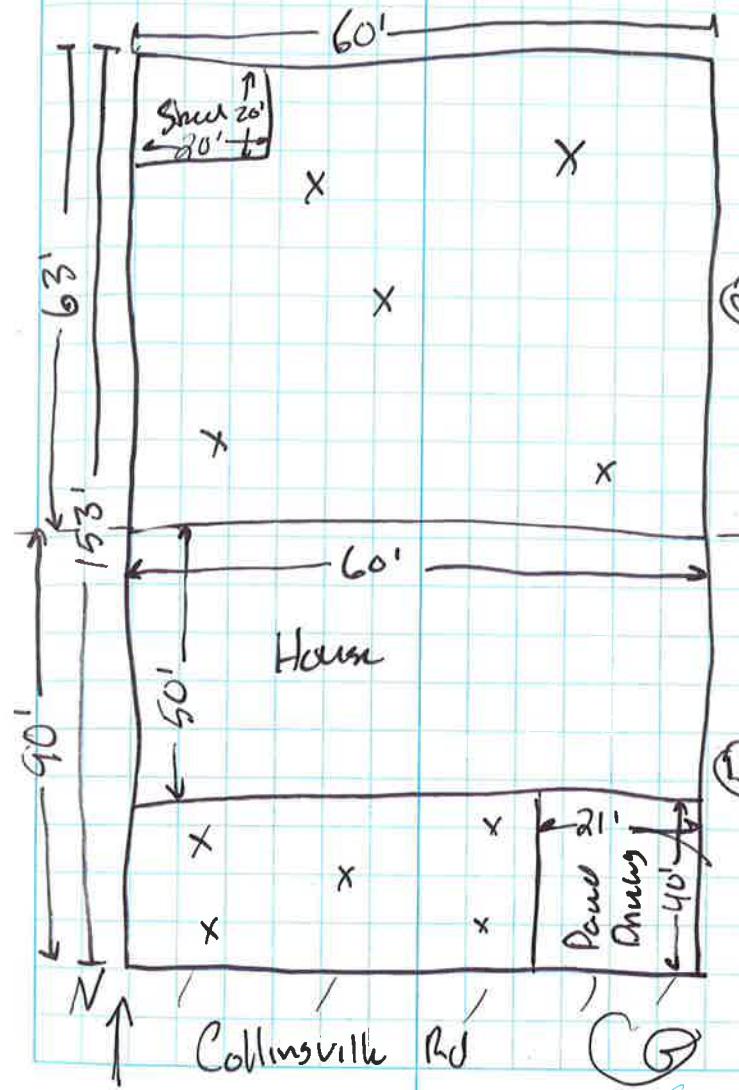
Auger cleaned between intervals and yard areas per FOP.



(Q)

Location East St. LouisProject / Client OAZ/EPADate 9/16/19

117

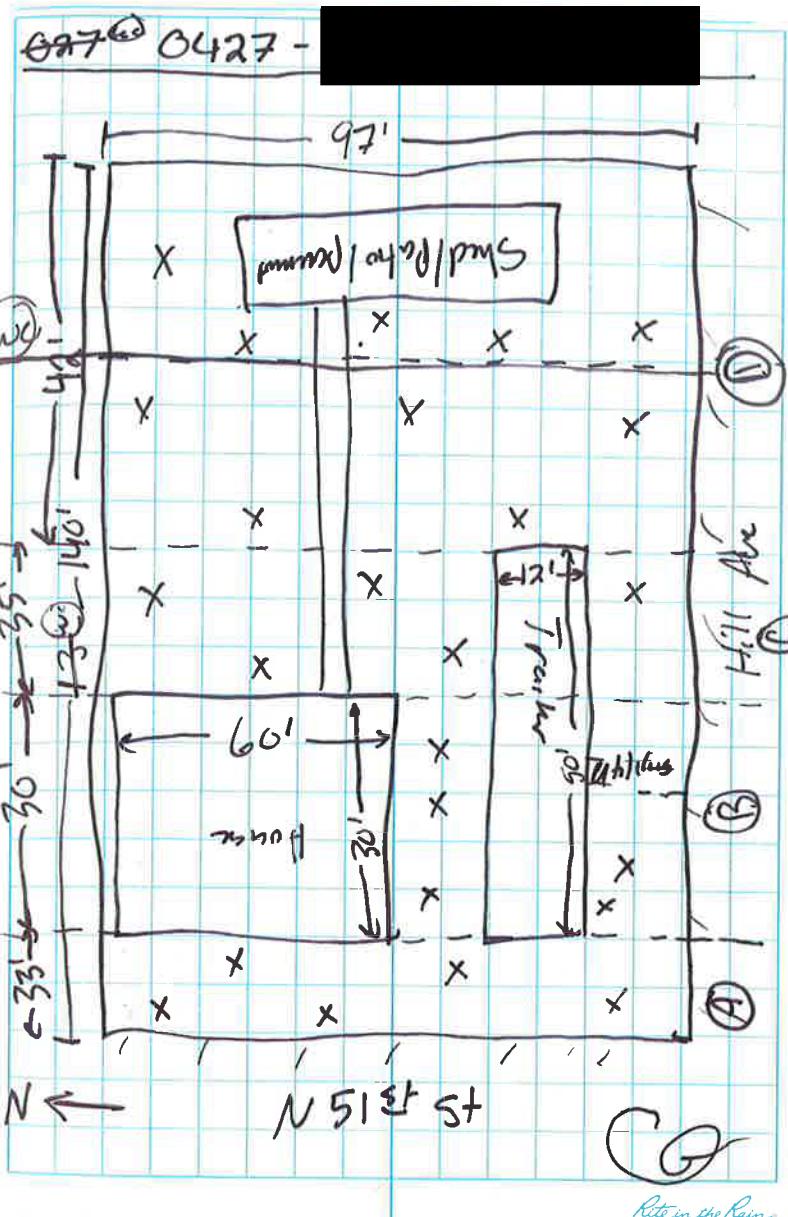
1000 - 5801 Collinsville Rd

Rate in the Rain

- 1300 - [EB-014] collected on 9/16/19
- 0825 - OAZ-0427A-00106 collected
- 0830 - OAZ-0427A-06112 collected
- 0835 - OAZ-0427A-12118 collected
- 0840 - OAZ-0427A-18124 collected
- 0845 - OAZ-0427B-00106 collected
- 0850 - OAZ-0427B-06112 collected
- 0855 - OAZ-0427B-12118 collected
- 0900 - OAZ-0427B-18124 collected
- 0905 - OAZ-0427C-00106 collected
- 0910 - OAZ-0427C-06112 collected (point)
- 0913 - OAZ-0427C-06112R collected
- 0915 - OAZ-0427C-12118 collected (point)
- 0918 - OAZ-0427C-12118R collected
- 0920 - OAZ-0427C-18124 collected (point)
- 0923 - OAZ-0427C-18124R collected
- 0925 - OAZ-0427D-00106 collected (point)
- 0925 - OAZ-0427D-06106 MS/MSD collected
- 0930 - OAZ-0427D-06112 collected
- 0935 - OAZ-0427D-12118 collected
- 0940 - OAZ-0427D-18124 collected

Excuse soil returned to aliquot sample holes.  
Photos taken, flags pulled.

Auger cleaned between intervals and yard ones per FOP.

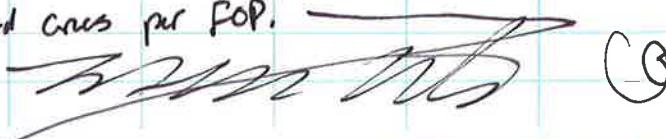
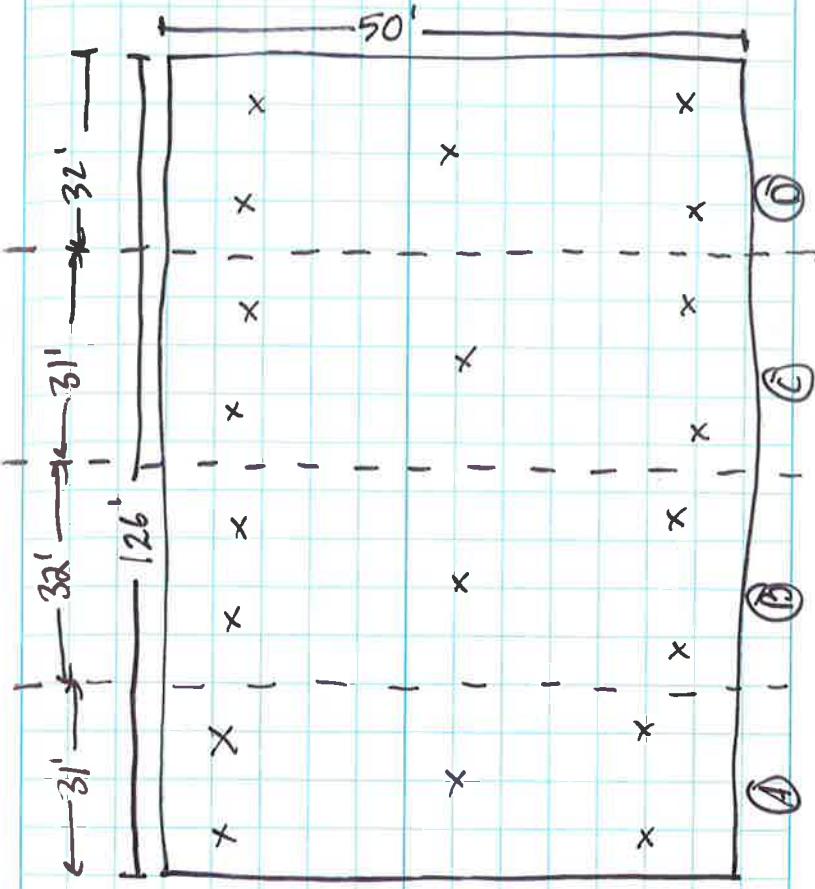


120 Location East St. LouisDate 9/17/19Project / Client OAZ/EPA

- 1000 - OAZ-0893A-00/06 collected  
 1005 - OAZ-0893A-06/12 collected part  
 1008 - OAZ-0893A-06/12R collected ✓  
 1005 - OAZ-0893A-06/12MS/MSD collected  
 1010 - OAZ-0893A-12/18 collected  
 1015 - OAZ-0893A-18/24 collected  
 1020 - OAZ-0893B-06/06 collected  
 1025 - OAZ-0893B-06/12 collected  
 1030 - OAZ-0893B-12/18 collected  
 1035 - OAZ-0893B-18/24 collected  
 1040 - OAZ-0893C-00/06 collected  
 1045 - OAZ-0893C-06/12 collected  
 1050 - OAZ-0893C-12/18 collected  
 1055 - OAZ-0893C-18/24 collected part  
 1058 - OAZ-0893C-18/24R collected ✓  
 1100 - OAZ-0893D-00/06 collected  
 1105 - OAZ-0893D-06/12 collected  
 1110 - OAZ-0893D-12/18 collected  
 1115 - OAZ-0893D-18/24 collected

Excess soil returned to aliquot yard areas  
 Photos taken, flags pulled.

Augers cleaned between intervals and  
 yard areas per F.O.P.


Location East St. LouisDate 9/17/19Project / Client OAZ/EPA0893 - Woodrow Ave.

N

To Train Park

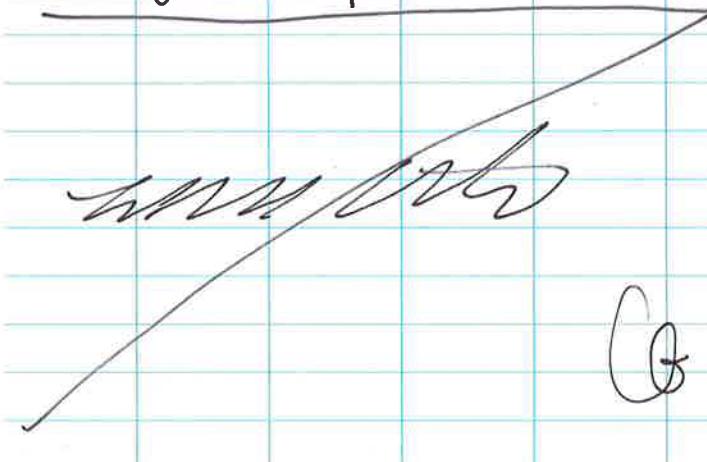
G

*Not to scale*

6300 sq ft lot - 1520 sq ft house  $\Rightarrow$  P/B

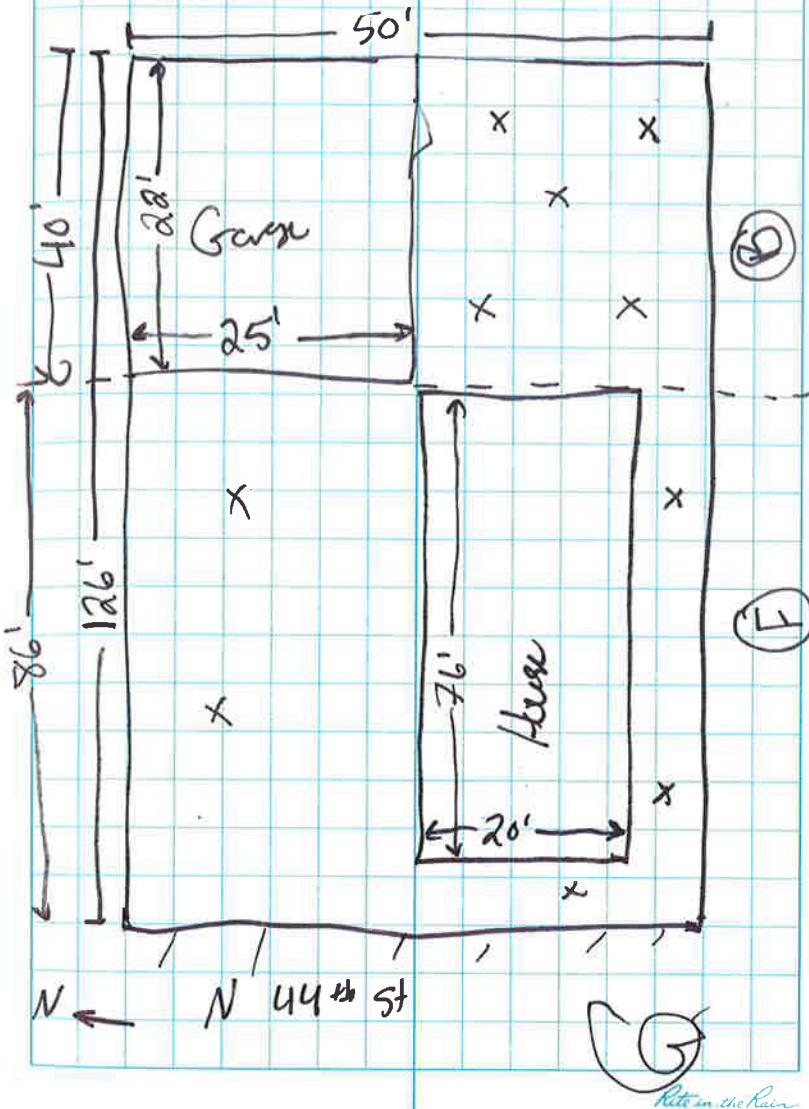
- 1320 OAZ-0793F-00/06 collected
- 1325 OAZ-0793F-06/12 collected
- 1330 OAZ-0793F-12/18 collected
- 1335 OAZ-0793F-18/24 collected
- 1340 OAZ-0793B-00/06 collected
- 1345 OAZ-0793B-06/12 collected
- 1350 OAZ-0793B-12/18 (collected point)
- 1353 OAZ-0793B-12/18R collected
- 1350 OAZ-0793B-12/18 MS/MSD added
- 1355 OAZ-0793B-18/24 collected

Excess soil returned to a back yard area. Photos taken. Flags pulled. Auger cleaned between intervals and yard areas per FOP.



G

0793- [REDACTED]



Location East St. Louis  
Project / Client OAZ/EPA

Date 9/17/19

- 1445 - OAZ-0061A-00106 collected  
 1450 - OAZ-0061A-06112 collected  
 1455 - OAZ-0061A-12118 collected  
 1500 - OAZ-0061A-18124 collected  
 1505 - OAZ-0061B-00106 collected  
 1510 - OAZ-0061B-06112 collected  
 1515 - OAZ-0061B-12118 collected  
 1520 - OAZ-0061B-18124 collected  
 1525 - OAZ-0061C-00106 collected (part)  
 1528 - OAZ-0061C-00106R collected  
 1530 - OAZ-0061C-06112 collected  
 1535 - OAZ-0061C-12118 collected  
 1540 - OAZ-0061C-18124 collected  
 1545 - OAZ-0061D-00106 collected  
 1550 - OAZ-0061D-06112 collected  
 1555 - OAZ-0061D-12118 collected  
 1600 - OAZ-0061D-18124 collected

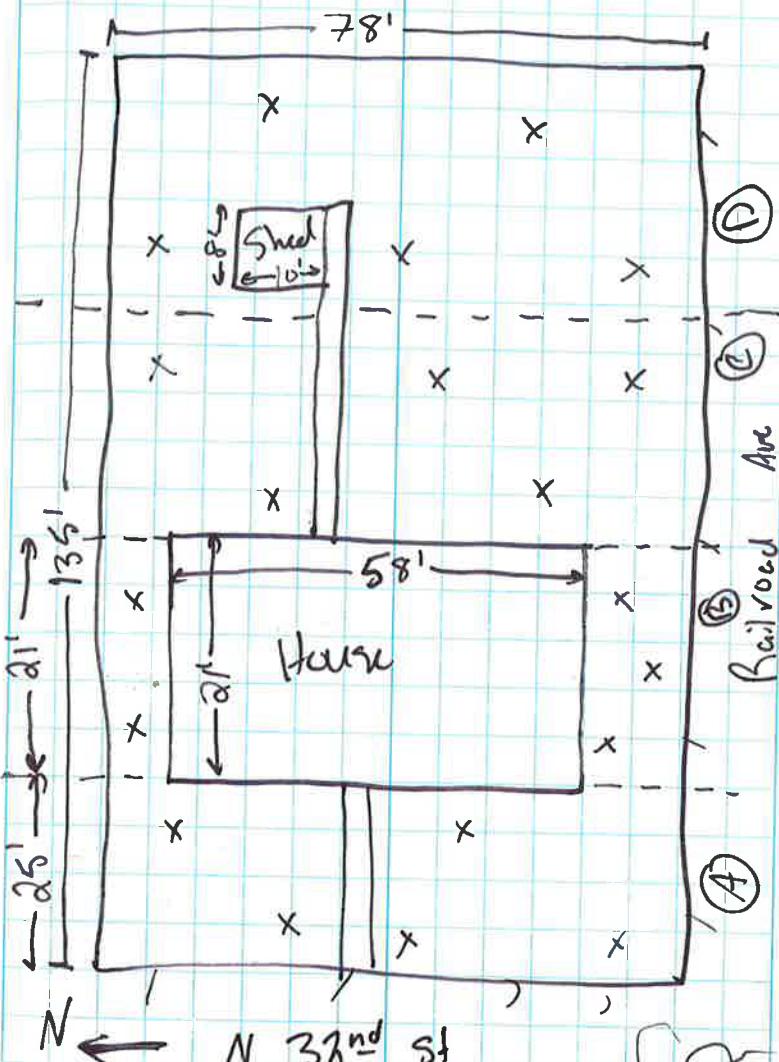
Excess soil returned to aliquot sample holes, Photos taken, flags pulled.  
 Auger cleaned between intervals and yard areas per FOP.

BL 2007 file

Location East St. Louis  
Project / Client OAZ/EPA

Date

9/17/19 125

0061-

Rite in the Rain

6500 ft<sup>2</sup> lot - 1260 ft<sup>2</sup> house - 400 ft<sup>2</sup> garage

→ ~4840 ft<sup>2</sup> soil profile on → P/B

1610 - OAZ-<sup>1052</sup>-0815F-06/06 colluvium

1615 - OAZ-<sup>1052</sup>-0815F-06/12 colluvium (40)

1620 - OAZ-<sup>1052</sup>-0815F-12/18 colluvium (20)

1625 - OAZ-<sup>1052</sup>-0815F-18/24 colluvium (10)

1628 - OAZ-<sup>1052</sup>-0815F-18/24R colluvium (20)

1625 - OAZ-<sup>1052</sup>-0815F-18/24 MS/MSD colluvium (20)

1630 - OAZ-<sup>1052</sup>-0815B-06/06 colluvium (0)

1635 - OAZ-<sup>1052</sup>-0815B-06/12 colluvium (0)

1640 - OAZ-<sup>1052</sup>-0815B-12/18 colluvium (0)

1645 - OAZ-<sup>1052</sup>-0815B-18/24 colluvium (0)

Excess soil returned to aliquot sample holes. Photos taken, plugs pulled.

Auger cleaned between intervals and yard areas per FOP.

✓ ✓ ✓ ✓ ✓ ✓

CB

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House  
D/Lines  
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N↓

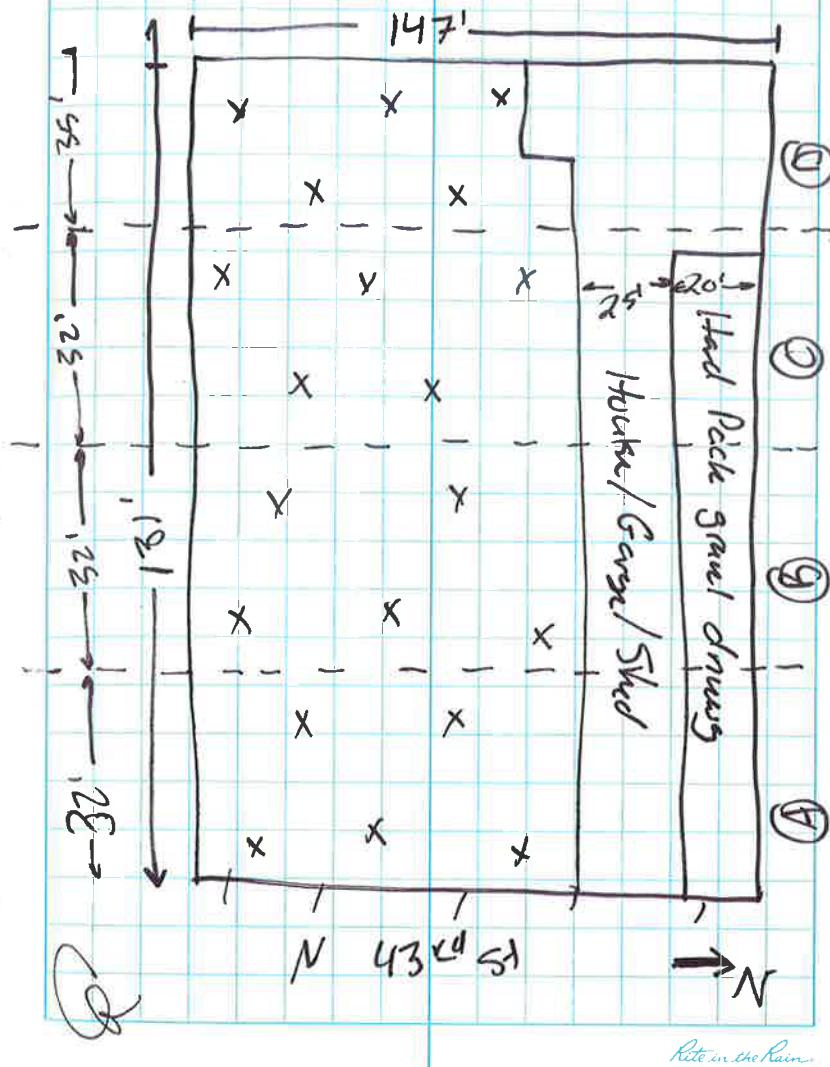
1052-  
Shed  
20' x 10'

1052-  
X

- 0800 - GAZ-0815A-00106 collected  
 0805 - GAZ-0815A-06/12 collected  
 0810 - GAZ-0815A-12/18 collected point  
 0813 - GAZ-0815A-12/18R collected ↗  
 0815 - GAZ-0815A-18/24 collected  
 0820 - GAZ-0815B-00106 collected point  
 0823 - GAZ-0815B-00106R collected ↗  
 0825 - GAZ-0815B-06/12 collected  
 0830 - GAZ-0815B-12/18 collected point  
 0833 - GAZ-0815B-12/18R collected ↗  
 0835 - GAZ-0815B-18/24 collected ↗  
 0835 - GAZ-0815B-18/24 MS/MSD collected  
 0840 - GAZ-0815C-00/06 collected  
 0845 - GAZ-0815C-06/12 collected  
 0850 - GAZ-0815C-12/18 collected  
 0855 - GAZ-0815C-18/24 collected  
 0900 - GAZ-0815D-00/06 collected  
 0905 - GAZ-0815D-06/12 collected point  
 0908 - GAZ-0815D-06/12R collected ↗  
 0910 - GAZ-0815D-06/12 MS/MSD collected  
 0915 - GAZ-0815D-12/18 collected  
 0920 - GAZ-0815D-18/24 collected

Excess soil returned to aliquot sample holes.  
 Photos taken, flags pulled. Auger cleaned between  
 intervals and yard areas per F.O.P. → ~~✓~~

0815- [REDACTED]

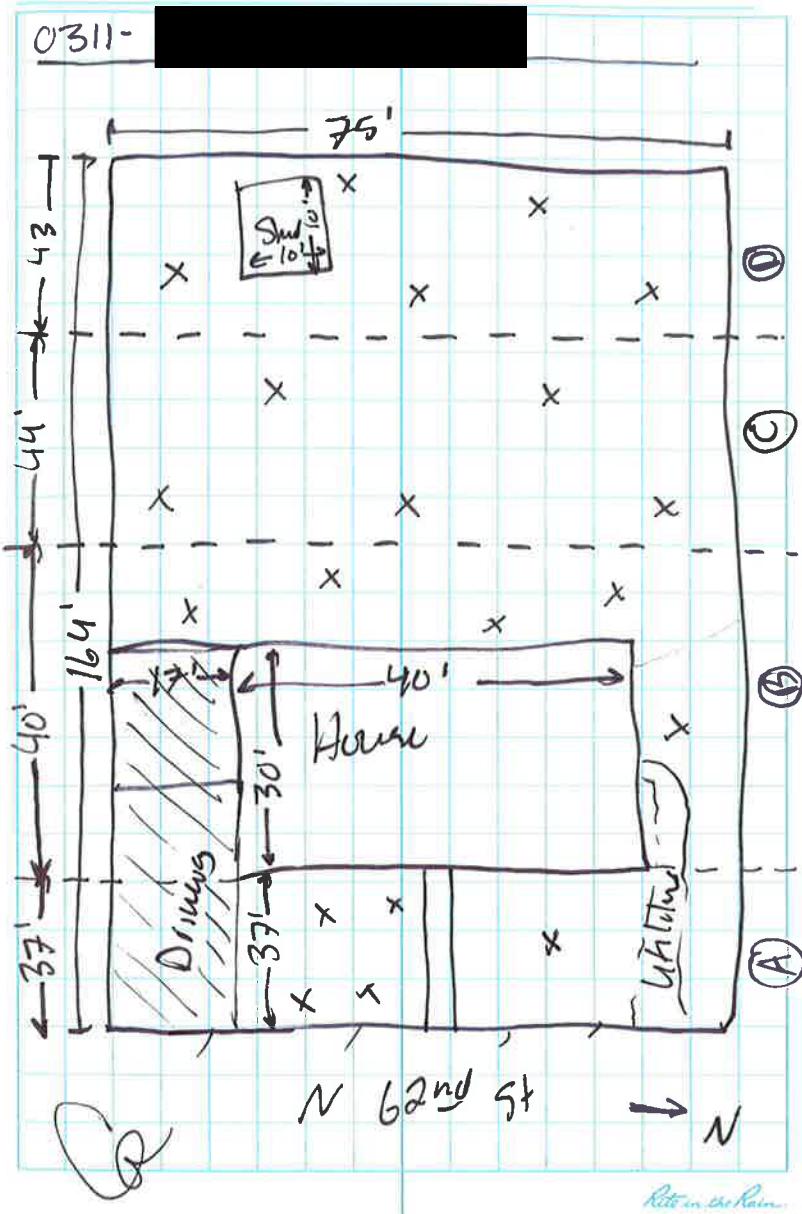


- 0945 - OAZ-0311A-00106 collected  
 0950 - OAZ-0311A-06112 collected  
 0955 - OAZ-0311A-12118 collected  
 1000 - OAZ-0311A-18124 collected  
 1005 - OAZ-0311B-00106 collected  
 1010 - OAZ-0311B-06112 collected  
 1015 - OAZ-0311B-12118 collected  
 1020 - OAZ-0311B-18124 collected (part)  
 1023 - OAZ-0311B-18124R collected  
 1025 - OAZ-0311C-00106 collected  
 1030 - OAZ-0311C-06112 collected  
 1035 - OAZ-0311C-12118 collected  
 1040 - OAZ-0311C-18124 collected  
 1045 - OAZ-0311D-06106 collected  
 1050 - OAZ-0311D-06112 collected  
 1055 - OAZ-0311D-12118 collected  
 1100 - OAZ-0311D-18124 collected

Excess soil returned to aliquot sample holes. Photos taken, flags pulled.

Auger cleaned between yard areas and intervals per FOP.

*B3 1122 JHS CQ*



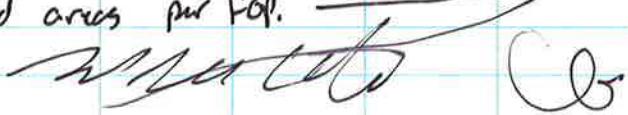
Location East St. Louis  
Project / Client OAZ/EPA

Date 9/18/19

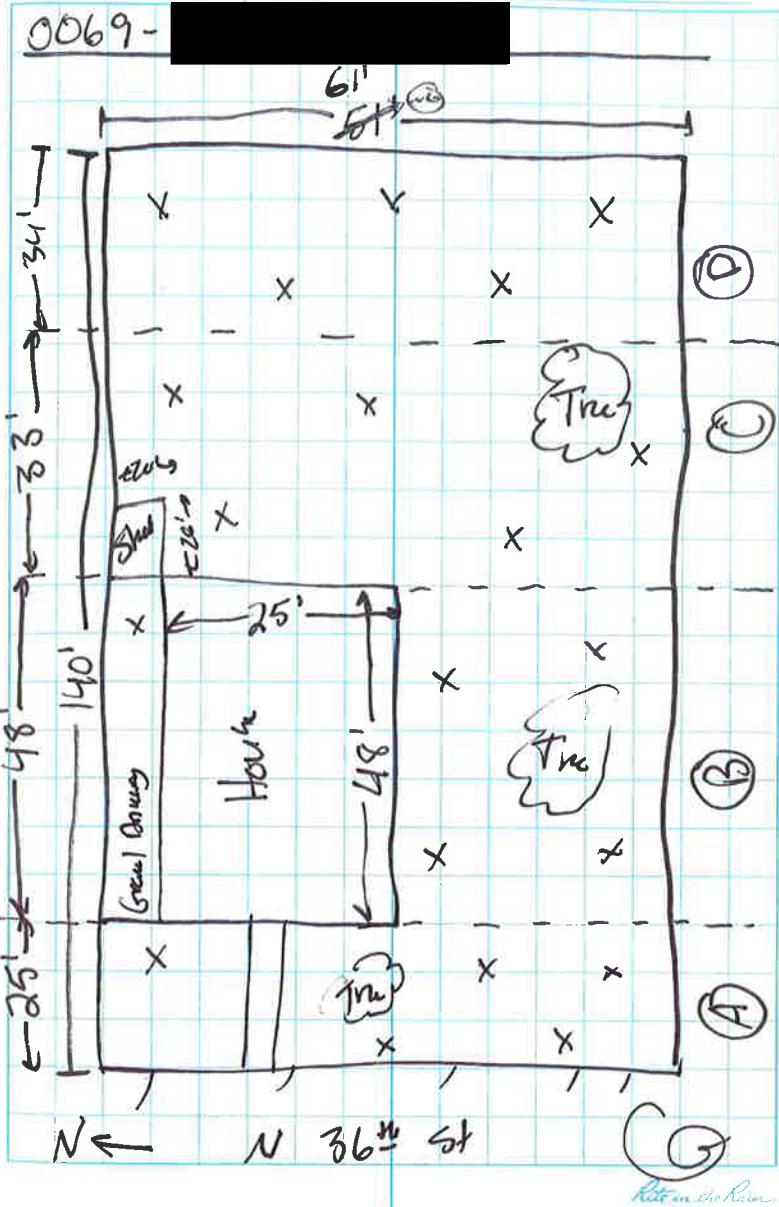
- 1110 - OAZ-0069A-00106 collected  
 1113 - OAZ-0069A-06112 collected  
 1116 - OAZ-0069A-12118 collected part  
 1119 - OAZ-0069A-12118R collected ←  
 1116 - OAZ-0069A-12118 MS/MSD collected  
 1121 ~~149~~ - OAZ-0069A-18124 collected  
 1125 - OAZ-0069B-00106 collected  
 1130 - OAZ-0069B-06112 collected  
 1135 - OAZ-0069B-12118 collected  
 1140 - OAZ-0069B-18124 collected  
 1143 - OAZ-0069C-00106 collected  
 1146 - OAZ-0069C-06112 collected  
 1149 - OAZ-0069C-12118 collected  
 1152 - OAZ-0069C-18124 collected  
 1155 - OAZ-0069D-00106 collected  
 1158 - OAZ-0069D-06106R collected  
 1201 - OAZ-0069D-06112 collected  
 1204 - OAZ-0069D-12118 collected  
 1207 - OAZ-0069D-18124 collected

Excuse soil returned to aliquot yard areas. Photos taken, flags pulled.

Auger cleaned between intervals and yard areas per F.O.P.



Location East St. Louis  
Project / Client OAZ → OAZ/EPA

Date 9/18/19

$\sim 15,000 \text{ ft}^2$  yard core  $\Rightarrow A, B, C, D$

Assumed trapezoidal, estimated depth from 32nd st

$\sim 111 \text{ ft} \Rightarrow$  mean from 32<sup>nd</sup> st for intervals

1330 - OAZ-0131A-00/06 collected

1335 - OAZ-0131A-06/12 collected

1340 - OAZ-0131A-12/18 collected

1345 - OAZ-0131A-18/24 collected

1350 - OAZ-0131B-00/06 collected (u)

1355 - OAZ-0131B-06/12 collected (u)

1400 - OAZ-0131B-12/18 collected (u)

1405 - OAZ-0131B-18/24 collected (u)

1408 - OAZ-0131B-18/24R (u) collected (u)

(u) 1405 (u) 1414 OAZ-0131B-18/24, 1st/MSB collected

(u) 1409 - OAZ-0131C-00/06 collected

(u) 1411 - OAZ-0131C-06/12 collected (u) at 1409

(u) 1414 - OAZ-0131C-12/18 collected (u) at 1409

(u) 1417 - OAZ-0131C-18/24 collected (u)

1420 - OAZ-0131D-00/06 collected see page

1423 - OAZ-0131D-06/12 collected 138

1426 - OAZ-0131D-12/18 collected for C & B (u)

1429 - OAZ-0131D-18/24 collected Samples

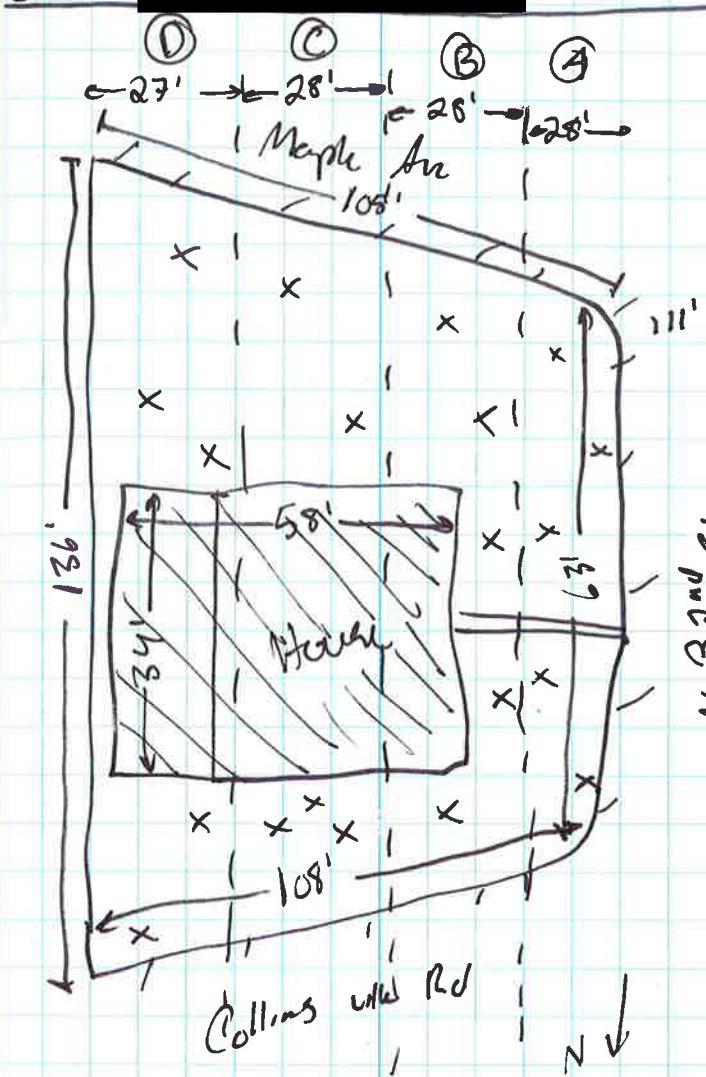
Excess soil returned to adjacent sample

holes. Photos taken, floss pulled.

Auger cleaned between intervals and

yard areas per FOP. —— cutout (u)

0131-



Location East St. LouisDate 9/18/19Project / Client OAZ/EPA

- 1560 - OAZ-0111F-00106 collected  
 1505 - OAZ-0111F-06112 collected  
 1510 - OAZ-0111F-12114 collected  
 1515 - OAZ-0111F-18124 collected  
 1520 - OAZ-0111B-00106 collected  
 1525 - OAZ-0111B-06112 collected  
 1530 - OAZ-0111B-12118 collected  
 1535 - OAZ-0111B-18124 collected

Extra soil returned to aliquot by sample holes. Photos taken, flags pulled.  
 Auger cleaned between intervals  
 and yard areas per pop.



G

Location East St. Louis

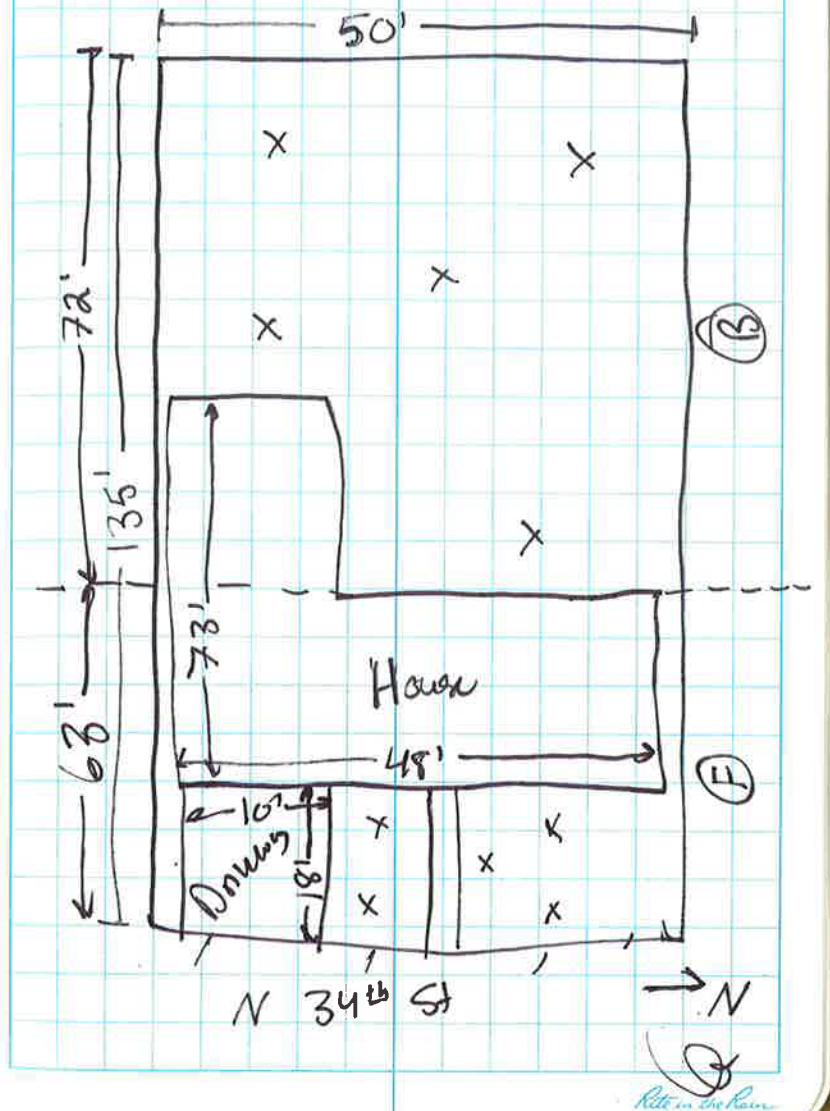
Date

9/18/19

137

Project / Client OAZ/EPA

0111-



Location East St. Louis  
Project / Client OAZ/EPA

Date 9/18/19

- |   |  |  |
|---|--|--|
| 1350 - OAZ-0131B-00106                  | Collected<br>Collected from<br>Collected page<br>Collected 131 | Collected<br>Collected<br>Collected<br>Collected point |
| 1355 - OAZ-0131B-06112                  |  |  |
| 1411 - OAZ-0131C-06112                  |  |  |
| 1414 - OAZ-0131C-12118                  |  |  |
| 1408 - OAZ-0131C-18124R                 |  |  |
| 1414 - OAZ-0131C-18124 MS/MSD collected |  |  |
| 1400 - OAZ-0131B-12118                  | Collected  |  |
| 1405 - OAZ-0131B-18124                  | Collected  |  |
| 1409 - OAZ-0131C-00106                  | Collected  |  |
| 1417 - OAZ-0131C-18124                  | Collected point  |  |

W.W.P. 10/19

C

Location East St. Louis  
Project / Client OAZ/EPA

Date 9/18/19

139

Intentionally  
Left  
Blank

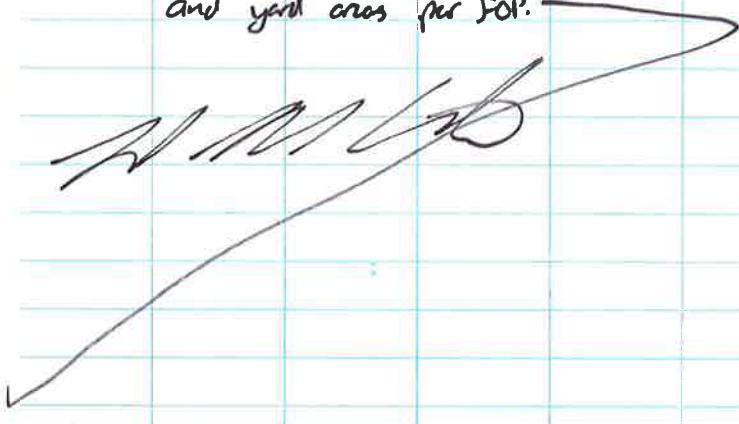
W.W.P. 10/19

G  
All on the Rain

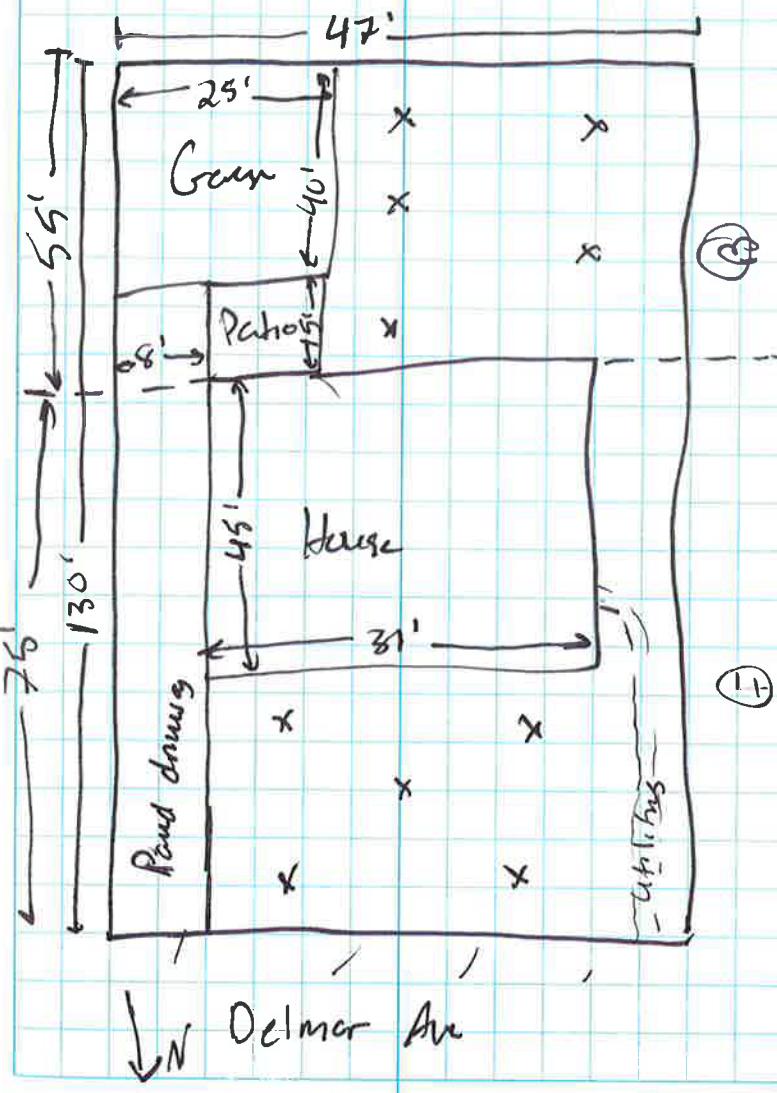
Utilities located at property, including Julie markings.

- 0800 - OAZ-0369F-00106 collect
- 0805 - OAZ-0369F-06112 collect
- 0810 - OAZ-0369F-12118 collect
- 0815 - OAZ-0369F-18129 collect
- 0820 - OAZ-0369B-00106 collect
- 0825 - OAZ-0369B-06112 collect part
- 0828 - OAZ-0369B-06112R collect
- 0825 - OAZ-0369B-06112 MS/MSD collect
- 0830 - OAZ-0369B-12118 collect
- ~~OAZ-0369B-12118~~ collect
- 0835 - OAZ-0369B-18124 collect

Excess soil returned to aliquot sample holes.  
 Photos taken, flags pulled  
 Auger cleaned between intervals  
 and yard areas per SOP.



0369 -



Location East St. Louis

Date 9/10/19

Project / Client OAZ/EPAs

0700-Morning safety meeting. Sign ~~SOIL~~ HASP signs.

Load vehicles, prepare for sampling

0730-To 2963 N 63rd St

- 0840 - OAZ-0200A-00106 collected
- 0845 - OAZ-0200A-06112 collected
- 0850 - OAZ-0200A-12118 collected
- 0855 - OAZ-0200A-18124 collected
- 0900 - OAZ-0200B-00106 collected
- 0905 - OAZ-0200B-06112 collected
- 0910 - OAZ-0200B-12118 collected
- 0915 - OAZ-0200B-18124 collected
- 0920 - OAZ-0200C-00106 collected
- 0925 - OAZ-0200C-06112 collected
- 0930 - OAZ-0200C-06112R collected (parent) ↙
- 0935 - OAZ-0200C-12118 collected
- 0940 - OAZ-0200C-18124 collected
- 0945 - OAZ-0200D-00106 collected
- 0950 - OAZ-0200D-06112 collected
- 0955 - OAZ-0200D-12118 collected
- 1000 - OAZ-0200D-18124 collected

Excess soil returned to aliquot sample bins.

Photos taken, flags pulled.

Auger cleaned between intervals and  
yard ends.

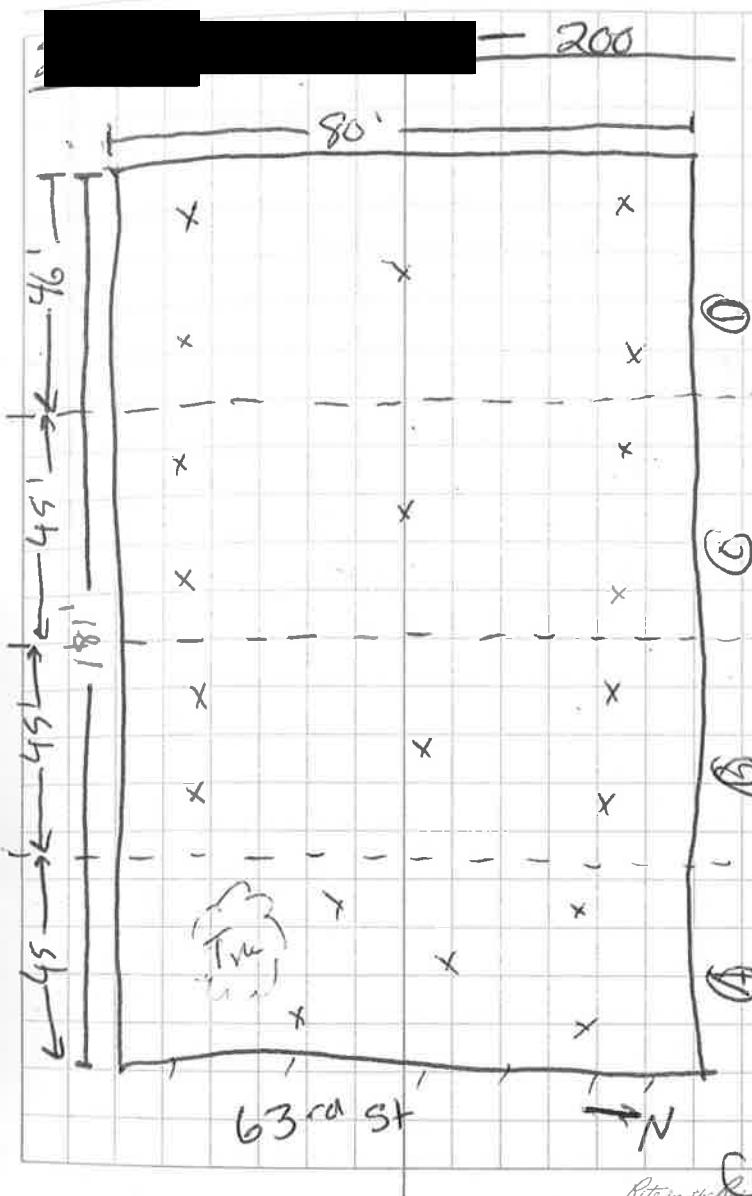
~~NO SOIL~~

(Q)

Location East St. Louis

Date 9/10/19

Project / Client OAZ/EPAs



88 Location East St. Louis  
Project / Client GAZ/EP.A

Date 9/10/19

- 1010 - GAZ-0201A-00/06 collected  
~~1011~~ - GAZ-0201A-06/12 collected  
1020 - GAZ-0201A-12/18 collected  
1025 - GAZ-0201A-18/24 collected  
1030 - GAZ-0201A-18/24R collected →  
1029 - GAZ-0201A-18/24 MS/MSD collected  
1030 - GAZ-0201B-00/06 collected  
1035 - GAZ-0201B-06/12 collected  
1040 - GAZ-0201B-12/18 collected  
1045 - GAZ-0201B-18/24 collected  
1050 - GAZ-0201C-00/06 collected  
1055 - GAZ-0201C-06/12 collected  
1100 - GAZ-0201C-12/18 collected  
1105 - GAZ-0201C-18/24 collected  
1110 - GAZ-0201D-00/06 collected  
1115 - GAZ-0201D-06/12 collected paint  
1118 - GAZ-0201D-06/12R collected →  
1120 - GAZ-0201D-12/18 collected  
1125 - GAZ-0201D-18/24 collected

Excuse soil returned to aliquot sample holes

Photos taken, flags pulled.

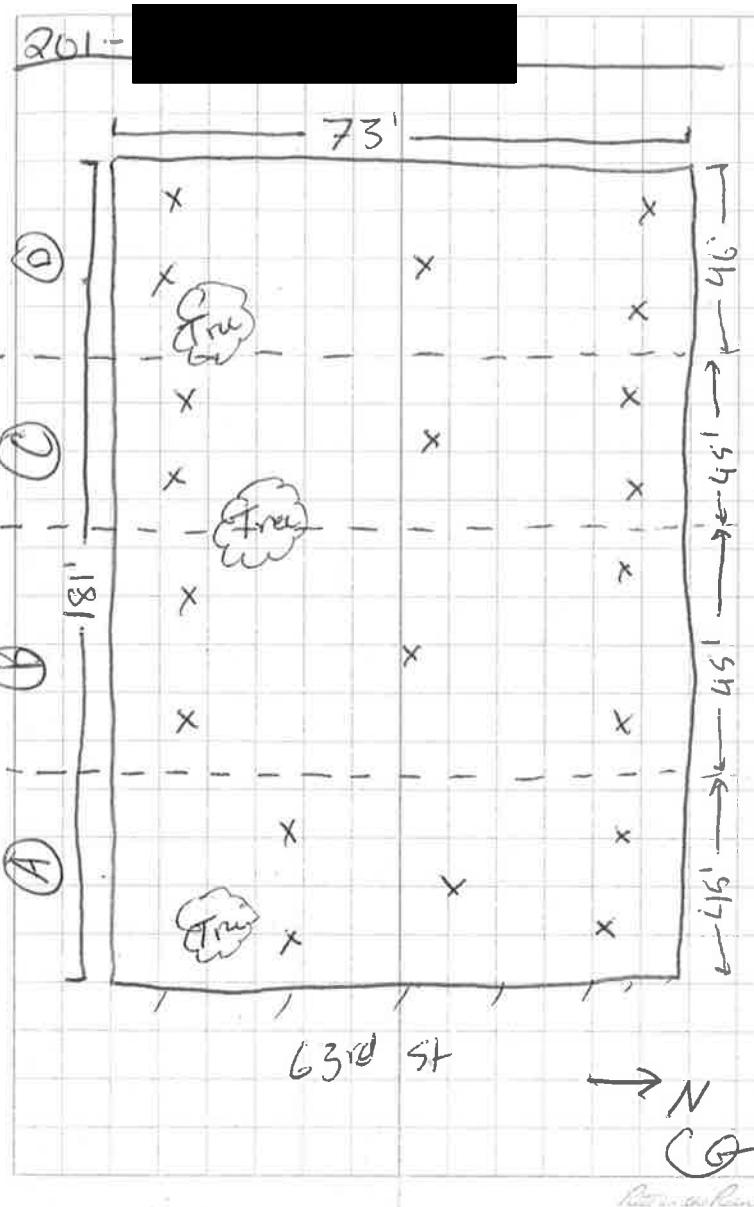
Augers cleaned between intervals and  
yard areas.

*John W. Smith*

(S)

Location East St. Louis  
Project / Client GAZ/EP.A

Date 9/10/19



146404# lot  $\Rightarrow$  A, B, C, D

1320 - OAZ-0203A-00106 Collected

1325 - OAZ-0203A-06112 Collected

1330 - OAZ-0203A-12118 Collected

1335 - OAZ-0203A-18124 Collected

1340 - OAZ-0203B-00106 Collected

1345 - OAZ-0203B-06112 Collected

1350 - OAZ-0203B-12118 Collected

1355 - OAZ-0203B-18124 Collected

1358 - OAZ-0203B-18124R Collected 2

1355 - OAZ-0203B-18124 MS/MSD Collected

1400 - OAZ-0203C-00106 Collected

1405 - OAZ-0203C-06112 Collected

1410 - OAZ-0203C-12118 Collected

1415 - OAZ-0203C-18124 Collected

1420 - OAZ-0203D-00106 Collected

1425 - OAZ-0203D-06112 Collected

1430 - OAZ-0203D-12118 Collected

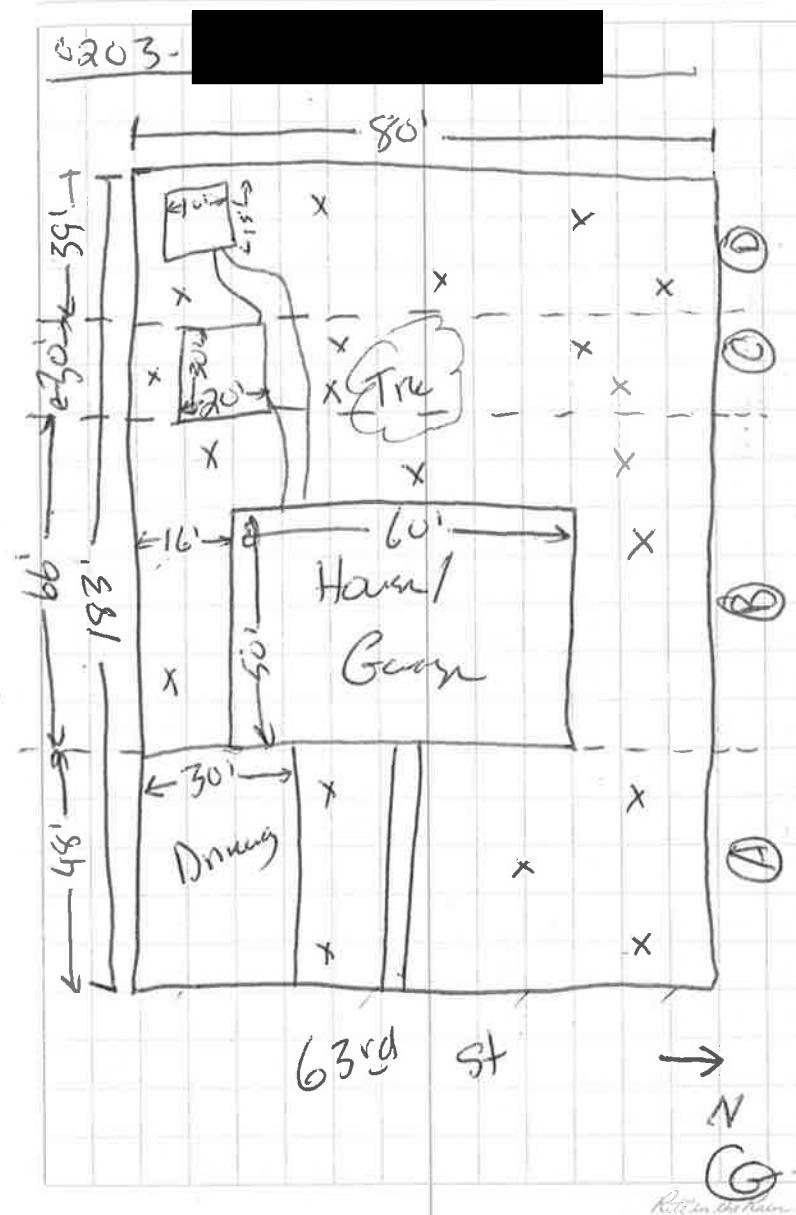
1435 - OAZ-0203D-18124 Collected

Excess soil returned to aliquot sample  
holes. Photos taken, flags pulled.

Precipitation noted. Major channel between  
intervals and yard areas.

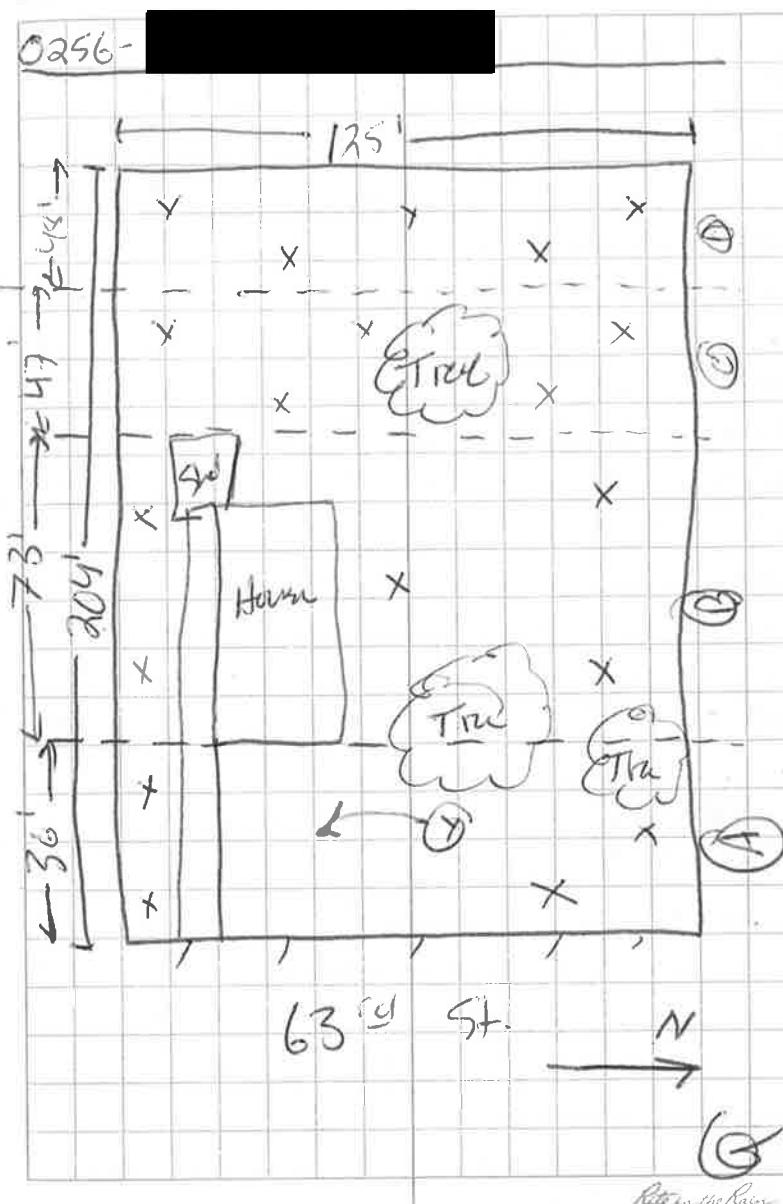
*[Handwritten signature]*

0203-



1455	OAZ-0256A-00106	collected
1500	OAZ-0256A-06112	collected
1505	OAZ-0256A-06112R	collected
1510	OAZ-0256A-12118	collected
1515	OAZ-0256A-18124	collected
1520	OAZ-0256B-00106	collected
1525	OAZ-0256B-06112	collected
1530	OAZ-0256B-12118	collected
1535	OAZ-0256B-18124	collected
1540	OAZ-0256C-00106	collected
1545	OAZ-0256C-06112	collected
1550	OAZ-0256C-12118	collected
1555	OAZ-0256C-18124	collected
1558	OAZ-0256C-18124R	collected
1565	OAZ-0256C-18124 MS/MSD collected	
1600	OAZ-0256D-00106	collected
1602	OAZ-0256D-06112	collected
1604	OAZ-0256D-12118	collected
1606	OAZ-0256D-18124	collected

Excess soil returned to aliquot sample holes.  
 Photos taken, flags pulled. Resident notified  
 Auger cleaned between intervals and yard areas.



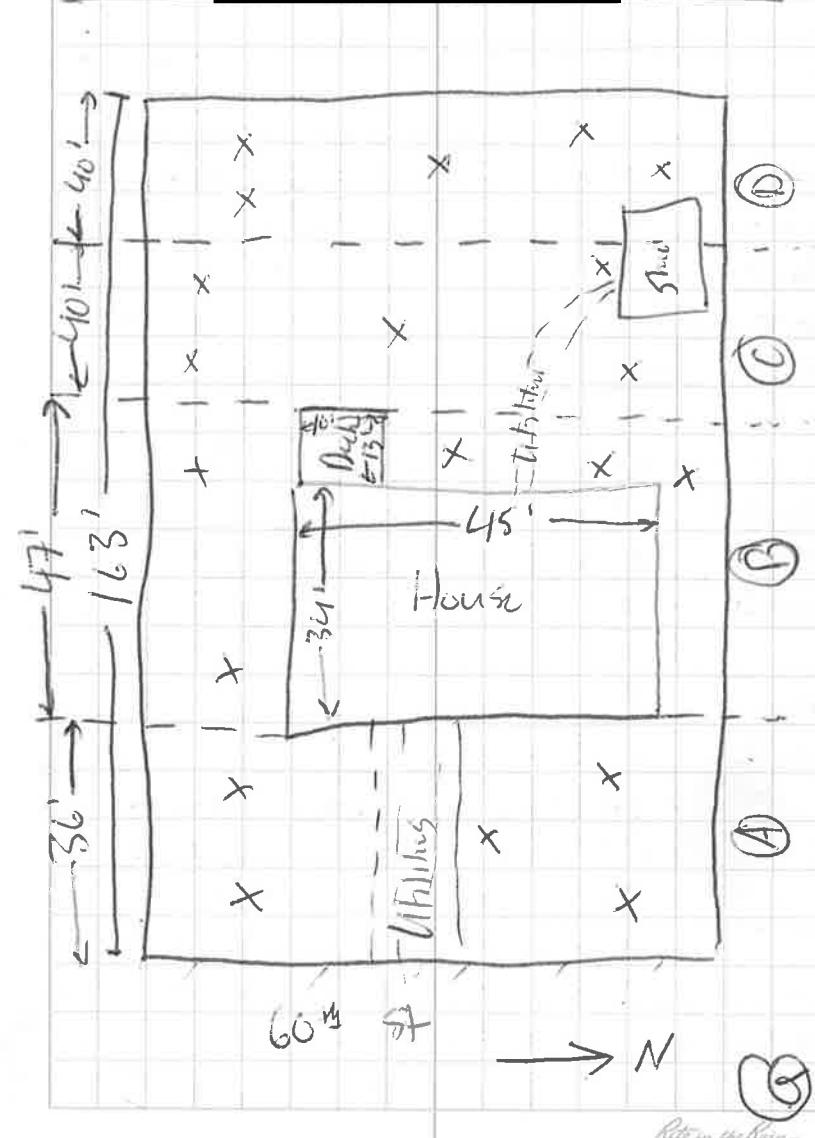
- 1410 - OAZ-0294A-00106 collected  
 1413 - OAZ-0294A-06112 collected  
 1416 - OAZ-0294A-12118 collected  
 1419 - OAZ-0294A-18124 collected  
 1422 - OAZ-0294B-00106 collected  
 1425 - OAZ-0294B-06112 collected  
 1428 - OAZ-0294B-12118 collected  
 1431 - OAZ-0294B-12118R collected  
 1434 - OAZ-0294B-18124 collected  
 1437 - OAZ-0294C-00106 collected  
 1440 - OAZ-0294C-06112 collected  
 1443 - OAZ-0294C-12118 collected  
 1446 - OAZ-0294C-18124 collected  
 1449 - OAZ-0294D-00106 collected  
 1452 - OAZ-0294D-06112 collected  
 1455 - OAZ-0294D-12118 collected  
 1458 - OAZ-0294D-18124 collected

Excess soil returned to aliquot sample holes.  
 Photos taken, flags pulled. President not bad.  
 Auger cleaned between intervals and  
 yard ones per S.O.P.

RMM/MS

(Q)

OAZ- [REDACTED]



Rite in the Rain

96 Location East St. Louis  
Project / Client OAZ/EPA

Date 9/11/19

0700-Morning, Safety meeting, to [REDACTED]

This property is sampled as quadrats per cell w/ Rachel Grand

Lots of strange utilities concerning property

1035 - OAZ-1012A-06106 (utility) at CS 106 0835

1040 - OAZ-1012A-06112 (utility) at CS 40 near

1045 - OAZ-1012A-06112 R (utility) at CS 45

1050 - OAZ-1012A-06112 MS/MSD at CS 40

0845 - OAZ-1012A-12118 (utility)

0848 - OAZ-1012A-18124 (utility)

0851 - OAZ-1012B-06106 (utility)

0854 - OAZ-1012B-06112 (utility)

0857 - OAZ-1012B-12118 (utility)

0900 - OAZ-1012B-18124 (utility)

0903 - OAZ-1012C-06106 (utility) Slab

0906 - OAZ-1012C-06112 (utility)

0909 - OAZ-1012C-12118 (utility)

0912 - OAZ-1012C-18124 (utility) point

0915 - OAZ-1012C-18124 R (utility)

0920 - OAZ-1012D-06106 (utility)

0929 - OAZ-1012D-06112 (utility)

0930 - OAZ-1012D-12118 (utility)

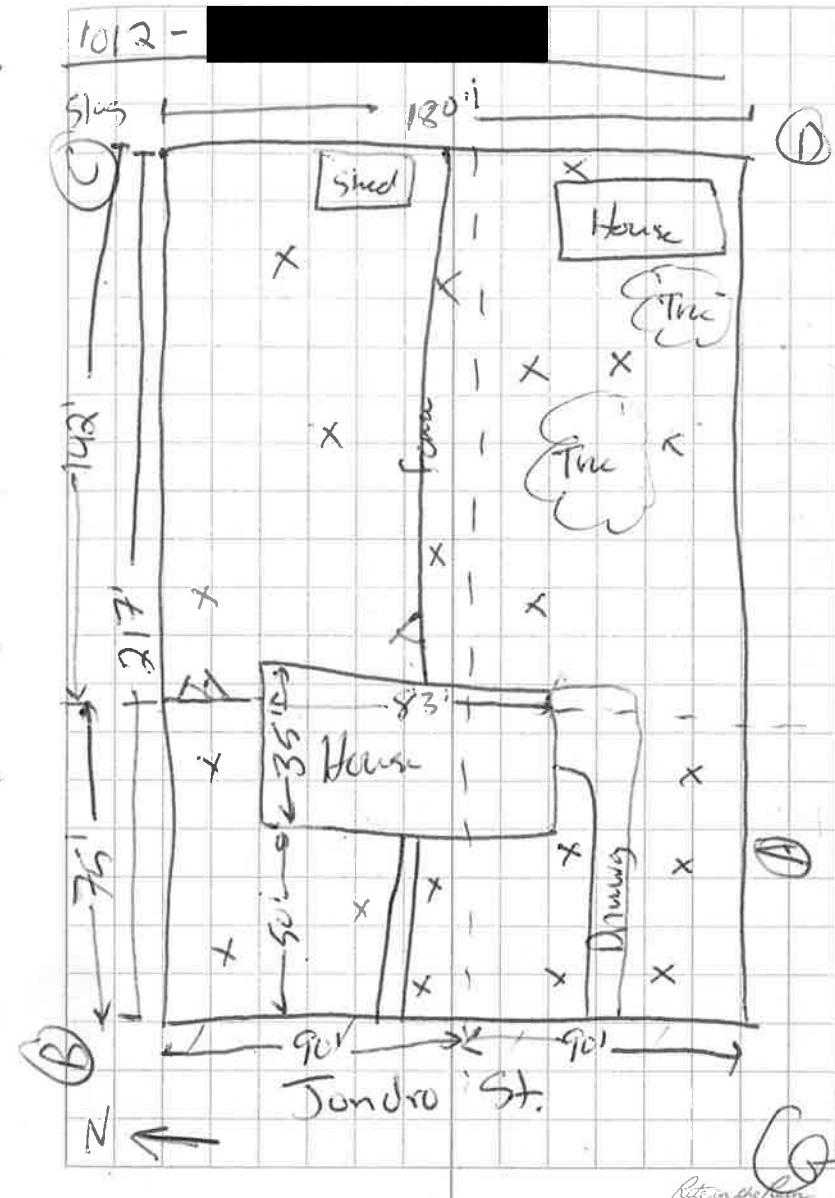
0935 - OAZ-1012D-18124 (utility)

Excuse soil related to adjacent yard areas. Photos taken, flags pulled.  
Areas cleaned between cores and intervals per Ron.

Location East St. Louis  
Project / Client OAZ/EPA

Date 9/11/19

97



Ron in the lead

Location East St. Louis  
Project / Client OAZ / EPA

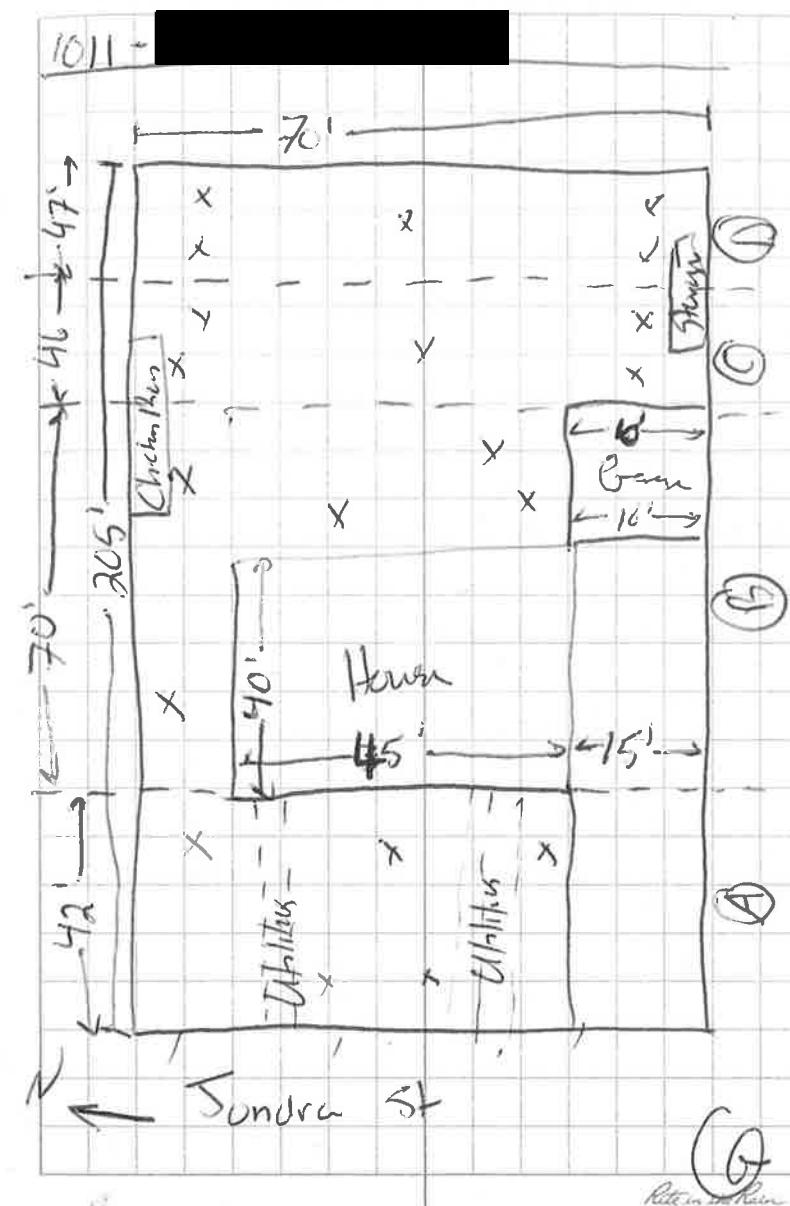
Date 9/11/19

- 0955 - OAZ-1011A-00106 Collected  
 1000 - OAZ-1011A-06112 Collected  
 1005 - OAZ-1011A-12118 Collected  
 1010 - OAZ-1011A-18124 Collected  
 1015 - OAZ-1011B-00106 Collected  
 1020 - OAZ-1011B-06112 Collected  
 1025 - OAZ-1011B-12118 Collected *(part)*  
 1025 - OAZ-1011B-12118 *MSJ, USD attached* Collected *(part)*  
 1030 - OAZ-1011B-18124 Collected  
 1035 - OAZ-1011C-00106 Collected  
 1040 - OAZ-1011C-06112 Collected  
 1045 - OAZ-1011C-12118 Collected  
 1050 - OAZ-1011C-18124 Collected  
 1055 - OAZ-1011D-00106 Collected  
 1100 - OAZ-1011D-06112 Collected  
 1105 - OAZ-1011D-12118 attached  
 1110 - OAZ-1011D-18124 attached

Excess soil returned to original sample holes.  
Photostation, flags pulled.

Auger cleaned between yard ones and  
intervals per FCP.

Location East St. Louis  
Project / Client OAZ / EPA

Date 9/11/19

Location East St. Louis  
Project / Client CAZ/EPD

9/11/19

7600 ft<sup>2</sup> lot - 1200 ft<sup>2</sup> Pond Parking area - 1710 ft<sup>2</sup> house  
 ⇒ less than 5000 ft<sup>2</sup> ⇒ F/R

Front inadequate footer to be a F/R, S incorporated  
 into F/R sections

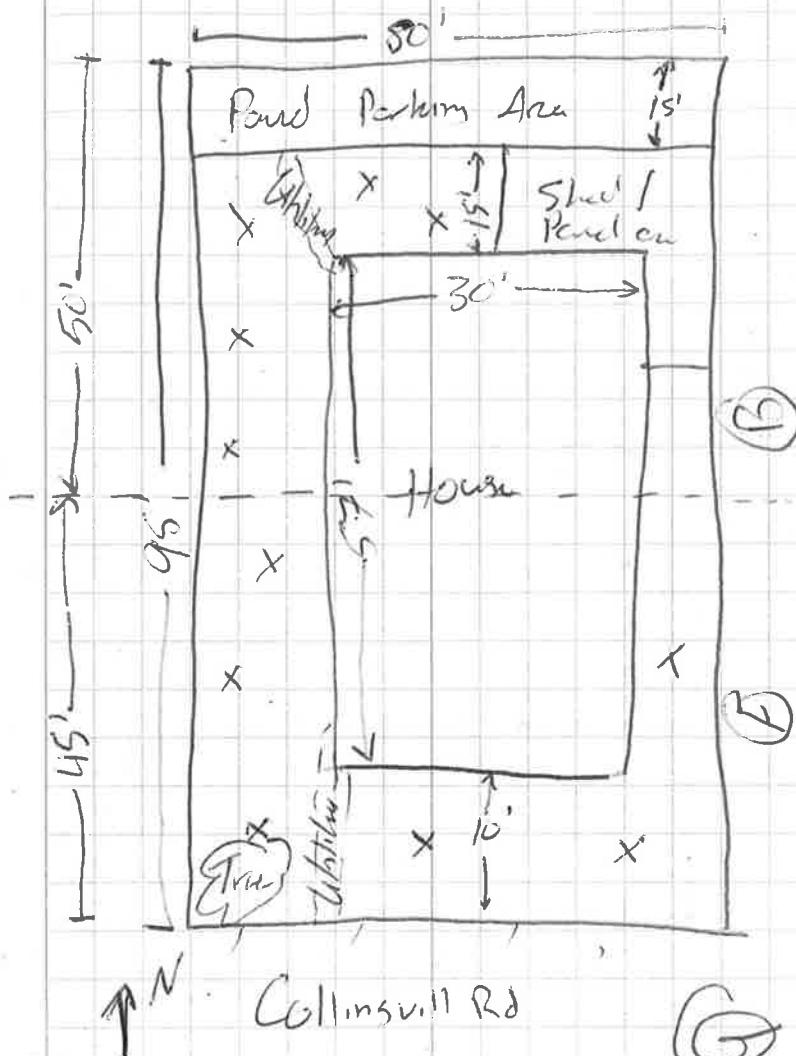
- 1130 - CAZ-1033F-00106 collected
- 1135 - CAZ-1033F-00108 collected
- 1140 - CAZ-1033F-00112 collected
- 1145 - CAZ-1033F-12118 collected
- 1150 - CAZ-1033F-15124 collected
- 1155 - CAZ-1033B-00104 collected
- 1200 - CAZ-1033B-06112 collected
- 1205 - CAZ-1033B-12118 collected
- 1210 - CAZ-1033B-18124 collected

Excess soil returned to aliquot sample  
 holes. Photos taken, flags pulled,  
 flagger cleaned between yard areas  
 and intervals per SOP.

Location East St. Louis  
Project / Client CAZ/EPD

9/11/19

1033-



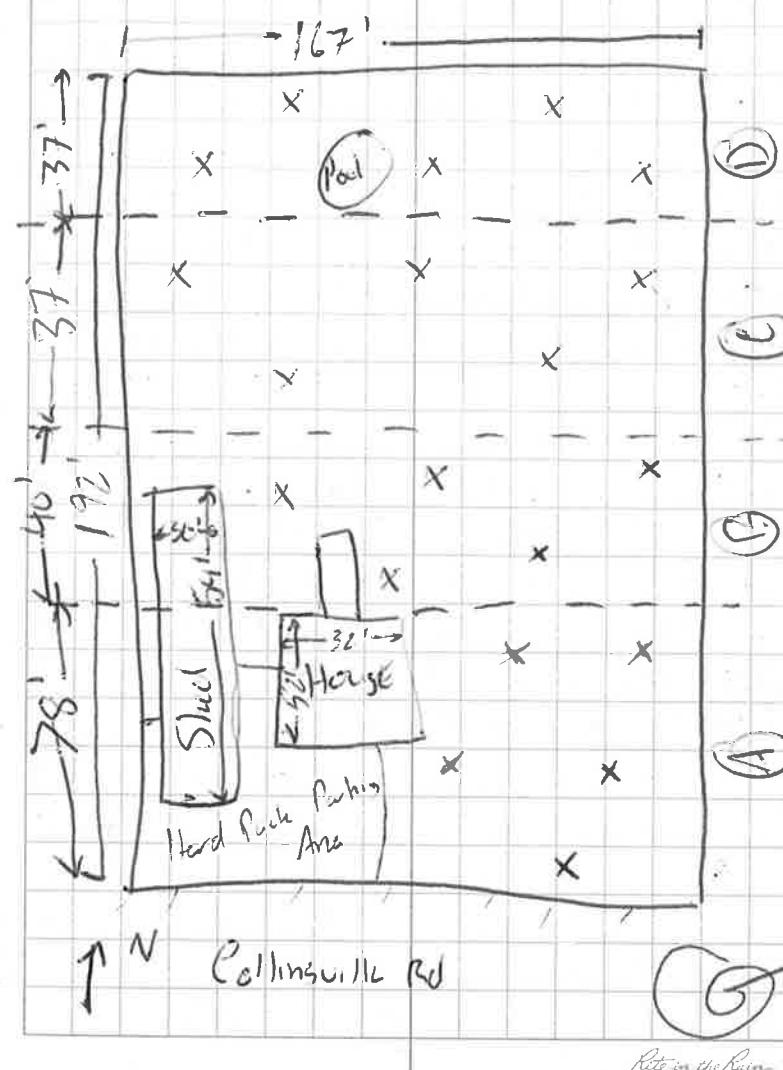
Rite in the Rain

1330 - CAZ-1018A-00106 collected  
 1335 - CAZ-10184-06112 collected  
 1340 - CAZ-1018A-12118 collected  
 1345 - CAZ-10184-18124 collected point  
 1348 - CAZ-1018A-18124R collected ←  
 1349 - CAZ-1018A-18124 MSJ, MSA collected  
 1350 - CAZ-1018B-00106 collected  
 1355 - CAZ-1018B-06112 collected  
 1400 - CAZ-1018B-12118 collected  
 1405 - CAZ-1018B-18124 collected  
 1410 - CAZ-1018C-00106 collected  
 1415 - CAZ-1018C-06112 collected  
 1420 - CAZ-1018C-12118 collected  
 1425 - CAZ-1018C-18124 collected  
 1428 - CAZ-1018D-00106 collected  
 1431 - CAZ-1018D-06112 collected point  
 1432 - CAZ-1018D-06112R collected ←  
 1434 - CAZ-1018D-12118 collected  
 1437 - CAZ-1018D-18124 collected

Excess Soil returned to client 56.00 ft. later  
Photos taken, flags pulled.

Auger cleaned between yard areas and  
intervals per COP.

1018-

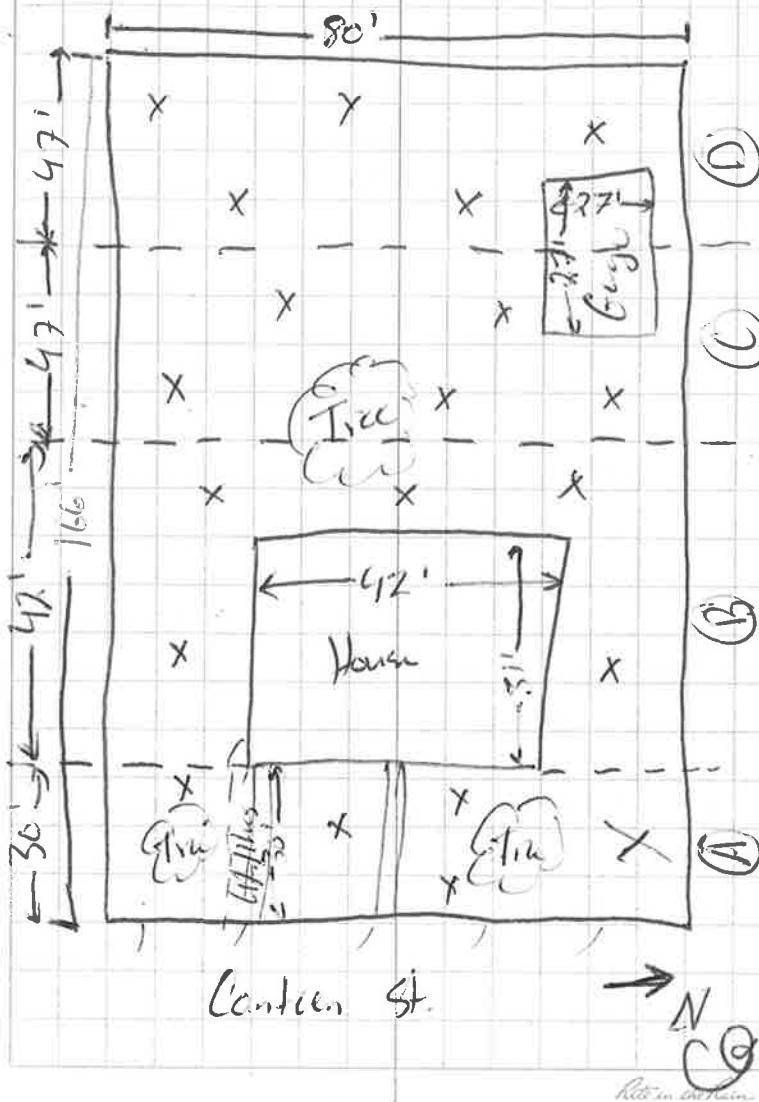


1450 CAZ-1019A-00106 collected  
 1453 CAZ-1019A-06112 collected  
 1456 CAZ-1019A-12118 collected  
 1459 CAZ-1019A-18124 collected  
 1502 CAZ-1019B-00106 collected  
 1505 CAZ-1019B-06112 collected  
 1508 CAZ-1019B-12118 collected  
 1511 CAZ-1019B-18124 collected  
 1514 CAZ-1019C-00106 collected point  
 1517 CAZ-1019C-06106R collected ↘  
 1520 CAZ-1019C-00106 MS/M SD collected  
 1526 CAZ-1019C-06112 collected  
 1523 CAZ-1019C-12115 collected  
 1526 CAZ-1019C-18124 collected  
 1529 CAZ-1019D-06106 collected  
 1532 CAZ-1019D-06112 collected  
 1535 CAZ-1019D-12118 collected  
 1538 CAZ-1019D-18124 collected

Excav soil removed to aliquot sample tubes  
 Photos taken, flags pulled  
 Auger cleared between intervals and  
 yard covers per sp.

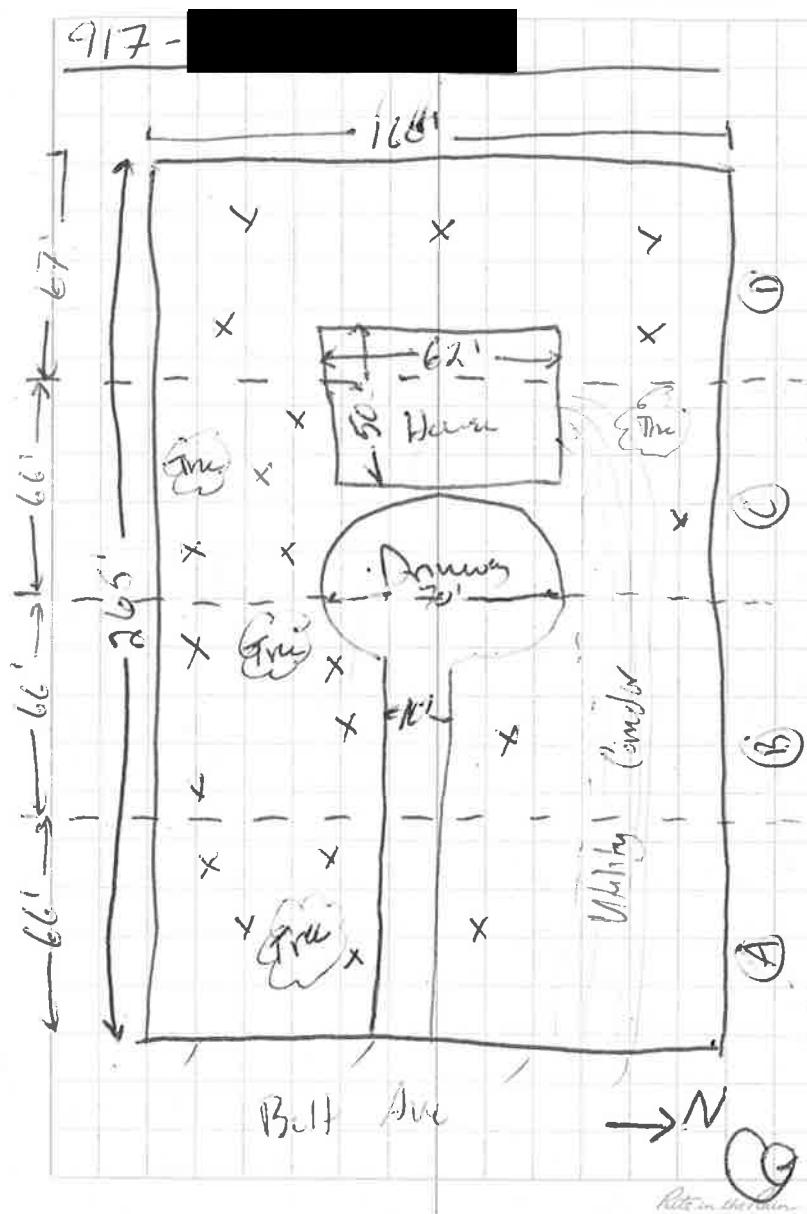
*B. B. Miller Q.*

1019-



CS05 - OAZ-C917A-CC16 collect  
 CS10 - OAZ-C917A-06/12 collect  
 CS15 - OAZ-C917A-12/18 collect (point)  
 CS20 - OAZ-C917A-12/18R collect  
 CS25 - OAZ-C917A-18/24 collect  
 CS30 - OAZ-C917B-00/06 collect  
 CS35 - OAZ-C917B-06/12 collect  
 CS40 - OAZ-C917B-12/18 collect  
 CS45 - OAZ-C917B-18/24 collect  
 CS50 - OAZ-C917C-00/06 collect  
 CS55 - OAZ-C917C-06/12 collect  
 CG60 - OAZ-C917C-12/18 collect  
 CG65 - OAZ-C917C-18/24 collect  
 CG70 - OAZ-C917D-CC16 collect  
 CG75 - OAZ-C917D-06/12 collect  
 CG80 - OAZ-C917D-06/12 R collect  
 CG85 - OAZ-C917D-06/12 MSL/MSP collect  
 CG90 - OAZ-C917D-12/18 collect  
 CG95 - OAZ-C917D-18/24 collect

Excess soil returned to original sample holes. Photos taken, flags pulled.  
 Auger cleaned between intervals and  
 yard ones per SOP.



Location East, St. Louis  
Project / Client OAZ/EPA

Date 9/12/19

- 0960 - OAZ-1028A-00/06 collected  
 0965 - OAZ-1028A-06/12 collected  
 0950 - OAZ-1028A-12/18 collected  
 0955 - OAZ-1028A-18/24 collected  
 1000 - OAZ-1028B-00/06 collected  
 1005 - OAZ-1028B-06/12 collected  
 1010 - OAZ-1028B-12/18 collected  
 1015 - OAZ-1028B-18/24 collected  
 1020 - OAZ-1028B-18/24 collected point  
 1023 - OAZ-1028B-18/24 R collected  
 1025 - OAZ-1028C-00/06 collected  
 1028 - OAZ-1028C-06/12 collected  
 1031 - OAZ-1028C-12/18 collected  
 1034 - OAZ-1028C-18/24 collected  
 1037 - OAZ-1028D-00/06 collected  
 1040 - OAZ-1028D-06/12 collected  
 1043 - OAZ-1028D-12/18 collected  
 1046 - OAZ-1028D-18/24 collected

Excuse soil return to original sample holes.

Photos taken, flags pulled.

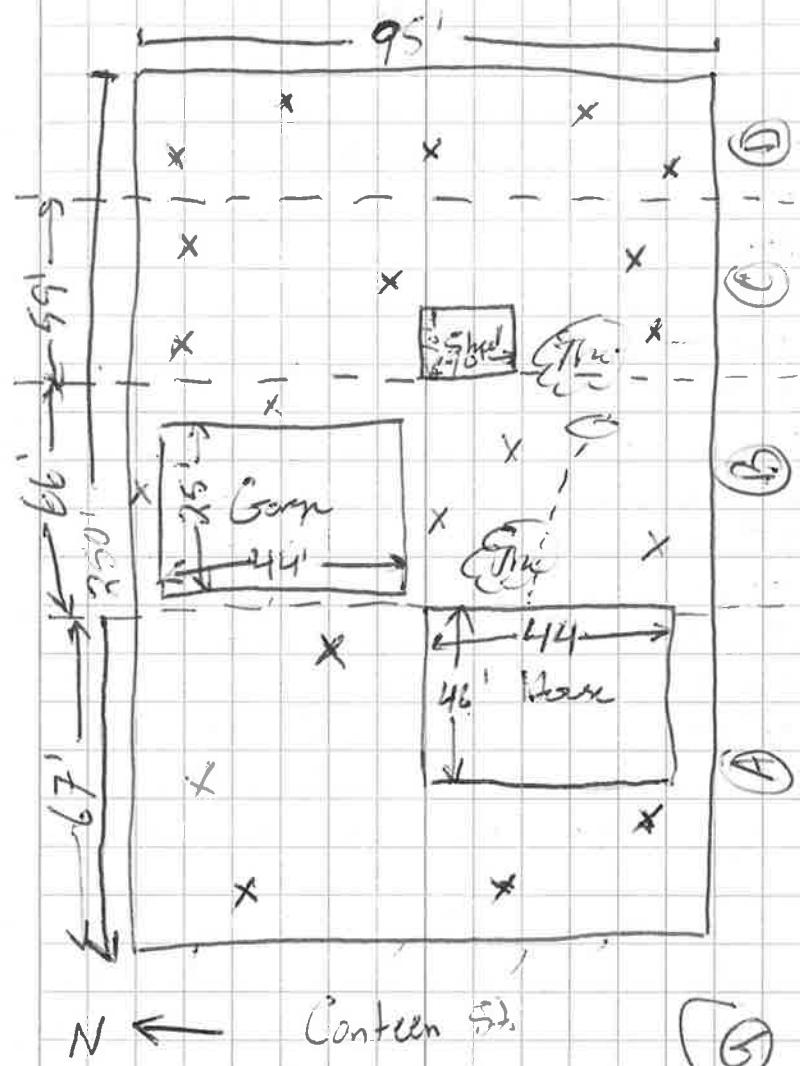
Auger cleaned between intervals and  
yard areas per SOP

~~W W W W T T T C C C~~

Location East St. Louis  
Project / Client OAZ/EPA

Date 9/12/19  
109

1028- [REDACTED]



110  
Location East St. Louis  
Project / Client OAZ/EPA

Date 9/12/19

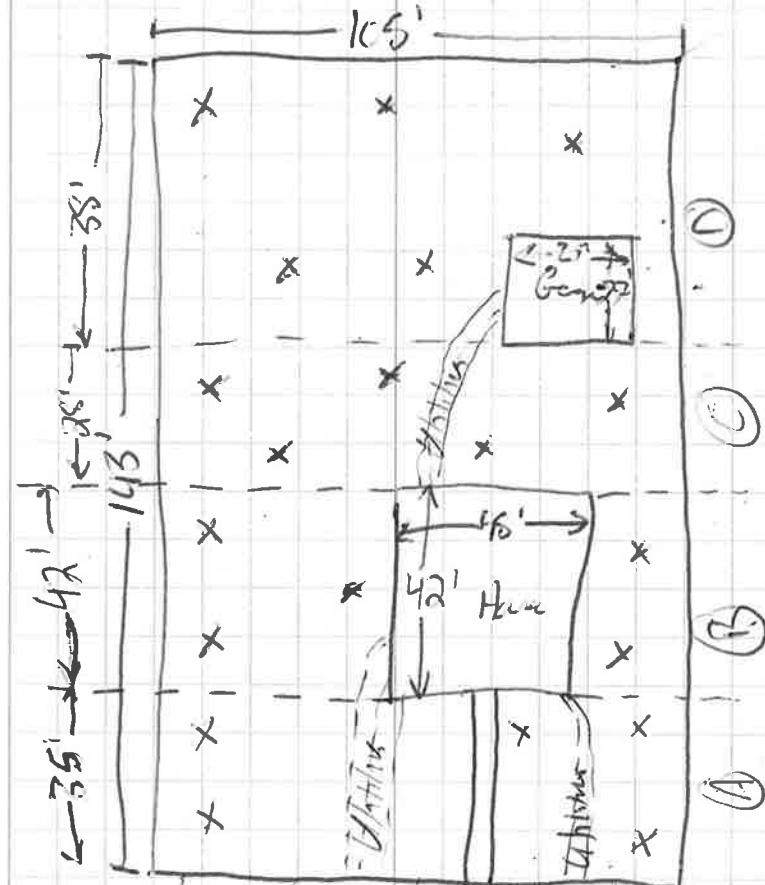
- 110 - OAZ-1030A-06/06 collected  
1105 - OAZ-1030A-06/12 collected  
1110 - OAZ-1030A-12/18 collected point  
1113 - OAZ-1030A-12/18R collected ↗  
1110 - OAZ-1030A-12/18, 1151, 1152 collected  
1115 - OAZ-1030A-18/24 collected  
1118 - OAZ-1030B-06/06 collected  
1121 - OAZ-1030B-06/12 collected  
1124 - OAZ-1030B-12/18 collected  
1127 - OAZ-1030B-18/24 collected  
1130 - OAZ-1030C-06/06 collected  
1133 - OAZ-1030C-06/12 collected  
1136 - OAZ-1030C-12/18 collected  
1139 - OAZ-1030C-18/24 collected  
1142 - OAZ-1030D-06/06 collected point  
1145 - OAZ-1030D-06/06R collected ↗  
1148 - OAZ-1030D-06/12 collected  
1151 - OAZ-1030D-12/18 collected  
1154 - OAZ-1030D-18/24 collected

Excess soil removed to adjacent sample  
blocks. Photos taken, flags placed.  
Aug. collected between yard ends  
and intervals per FOB

Location East St. Louis  
Project / Client OAZ/EPA

Date 9/12/19

1030 -



N ← Canteen St

Rite in the Rain

1300 - CAZ-C242A-00106 collected

1305 - CAZ-C242A-06112 collected

1310 - CAZ-C242A-12113 collected

1315 - CAZ-C242A-18124 collected

1320 - CAZ-C242B-06106 collected

1325 - CAZ-C242B-06112 collected

1330 - CAZ-C242B-12118 collected

~~CAZ-C242B-12118~~

1335 - CAZ-C242B-18124 collected

1338 - CAZ-C242B-18124R collected

1339 - CAZ-C242B-18124, 05/06/18 collected

1340 - CAZ-C242C-00106 collected

1341 - CAZ-C242C-06112 collected

1344 - CAZ-C242C-12118 collected

1347 - CAZ-C242C-18124 collected

1350 - CAZ-C242D-00106 collected

1353 - CAZ-C242D-06112 collected

1356 - CAZ-C242D-12118 collected

1359 - CAZ-C242D-18124 collected

Excess soil returned to aliquot sample  
holes. Photos taken, flags pulled.

Auger cleaned, lectures finished, and

yard clean per FOI.

*[Handwritten signature]*

C242-

93'

165'

(1)

X X X X

Tree Tree

X X X X

(2)

X X X X

Tree Tree

X X X X

(3)

X X X X

Tree Tree

X X X X

(4)

X X X X

N 61 ft S

→ N

(5)

Rite in the dark

Location East St. Louis  
Project / Client CAZ/EPA

Date 9/12/13

- 1430 - CAZ-C255.A-CC1C6 collected  
 1435 - CAZ-C255.A-06/12 collected part  
 1438 - CAZ-C255.A-06/12 R. collected  
 1440 - CAZ-C255.A-12/18 collected  
 1445 - CAZ-C255A-18/24 collected  
 1450 - CAZ-C255B-CC1C6 collected  
 1455 - CAZ-C255B-06/12 collected  
 1500 - CAZ-C255B-12/18 collected  
 1505 - CAZ-C255B-18/24 collected  
 1515 - CAZ-C255C-00/06 collected  
 1520 - CAZ-C255C-06/12 collected  
 1525 - CAZ-C255C-12/18 collected  
 1530 - CAZ-C255C-18/24 collected  
 1533 - CAZ-C255D-CC1C6 collected part  
 1536 - CAZ-C255D-CC1C6R collected  
~~1539~~ CAZ-C255D-CC1C6 (151,153) collected  
 1542 - CAZ-C255D-06/12 collected  
 1545 - CAZ-C255D-12/18 collected  
 1548 - CAZ-C255D-18/24 collected

Excess soil returned to original sample holes.

Photos taken, glass pulled.

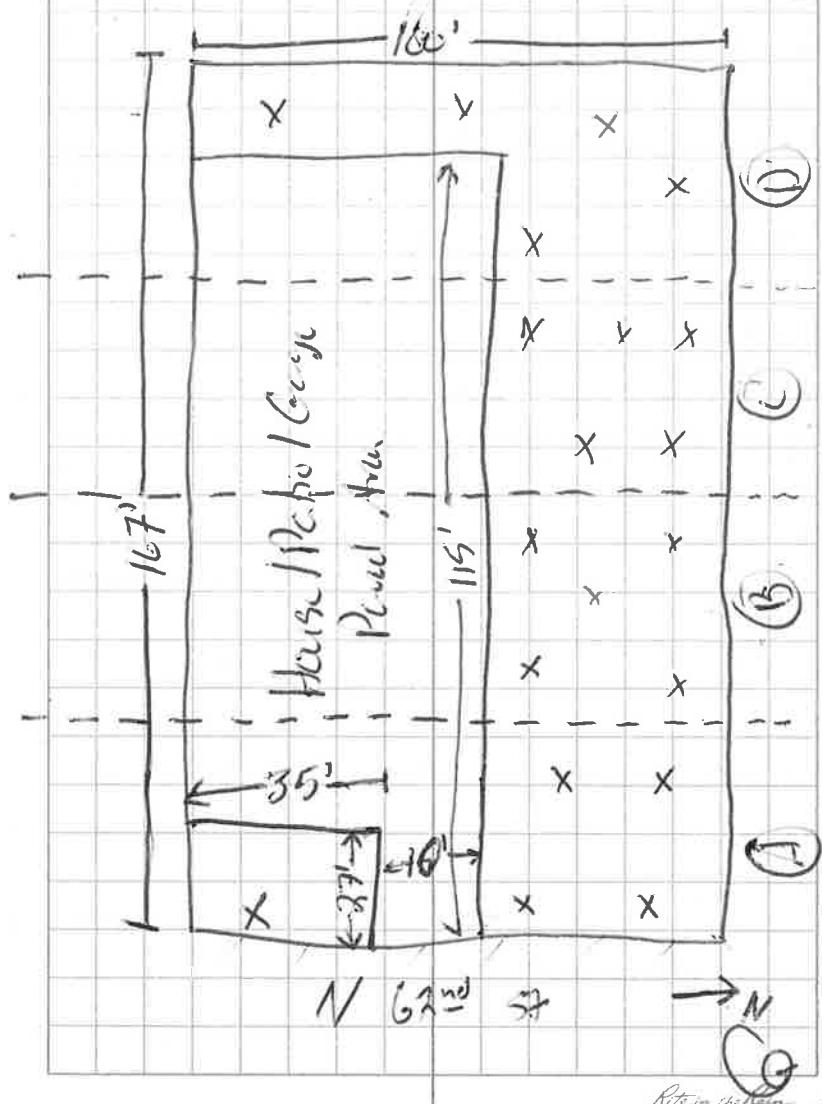
Auger cleaned between intervals and  
yard areas per SOP.

11/11/13

Location East St. Louis  
Project / Client CAZ/EPA

Date 9/12/13

0255 - [REDACTED]



Rate in the blank

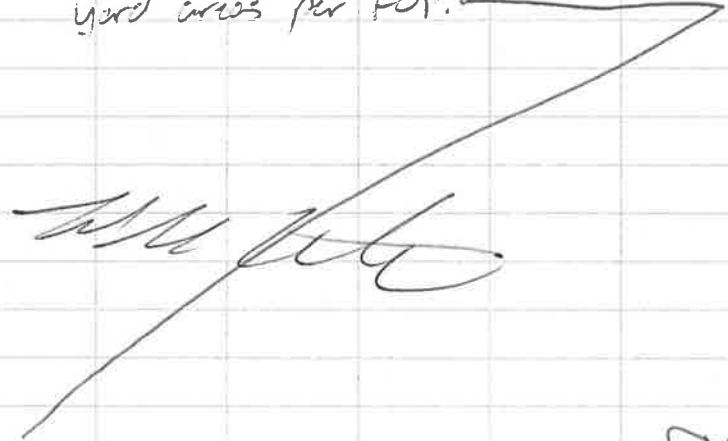
Location East St. Louis  
Project / Client OAZ/EPA

Date 9/12/191615 SAN

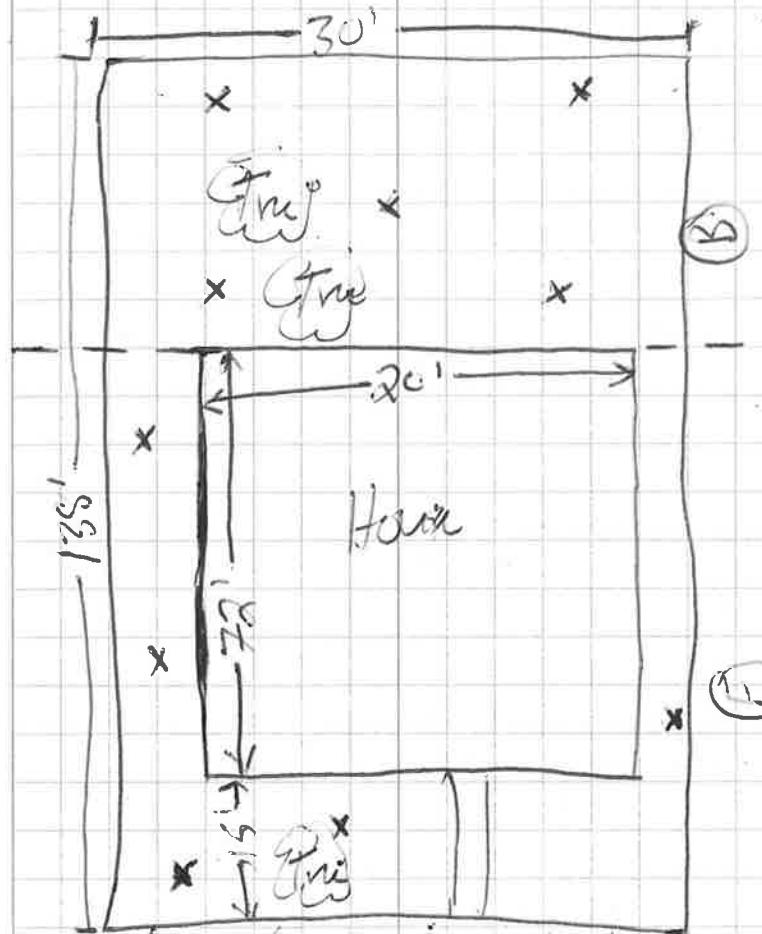
- 1600 - CAZ-C084 F - 06/06 collected  
 1620 - CAZ-C084 F - 06/12 collected  
 1625 - CAZ-C084 F - 12/18 collected  
 1630 - CAZ-C084 F - 18/24 collected  
 1635 - OAZ-C084 B - 06/06 collected  
 1640 - OAZ-C084 B - 06/12 collected  
 1645 - CAZ-C084 B - 12/18 collected  
 1650 - CAZ-C084 B - 12/18 collected  
 1655 - CAZ-C084 B - 18/24 collected

Excavate soil around to aliquot sample holes

Photos taken, flags pulled.

Auger cleaned between intervals and  
yard areas per FOP.CQ

Location East St. Louis  
Project / Client OAZ/EPA

Date 9/12/190084-N ← N 31st St

Rite in the rain

Location East St. Louis

Date 9/13/19

Project / Client OAZ/EPA

6496 ft<sup>2</sup> lot - 1090 ft<sup>2</sup> house - 330 ft<sup>2</sup> driveway

→ A, B, C, D

- 0745 - OAZ-0008A-00106 collected
- 0750 - OAZ-0008A-06112 collected
- 0755 - OAZ-0008A-12118 collected
- 0800 - OAZ-0008A-18124 collected
- 0805 - OAZ-0008B-00106 collected
- 0810 - OAZ-0008B-06112 collected
- 0815 - OAZ-0008B-12118 collected
- 0820 - OAZ-0008B-18124 collected
- 0825 - OAZ-0008C-00106 collected
- 0830 - OAZ-0008C-06112 collected plant
- 0833 - OAZ-0008C-06112R collected ↘
- 0830 - OAZ-0008C-06112 MS/MSD collected ↘
- 0835 - OAZ-0008C-12118 collected
- 0840 - OAZ-0008C-18124 collected
- 0843 - OAZ-0008D-00106 collected
- 0846 - OAZ-0008D-06112 collected
- 0849 - OAZ-0008D-12118 collected
- 0852 - OAZ-0008D-18124 collected

Excuse soil returned to aliquot sample holes.  
Photos taken, flags pulled.

Auger cleaned between yard areas and  
intervals per FOP.

*2000-09-13*

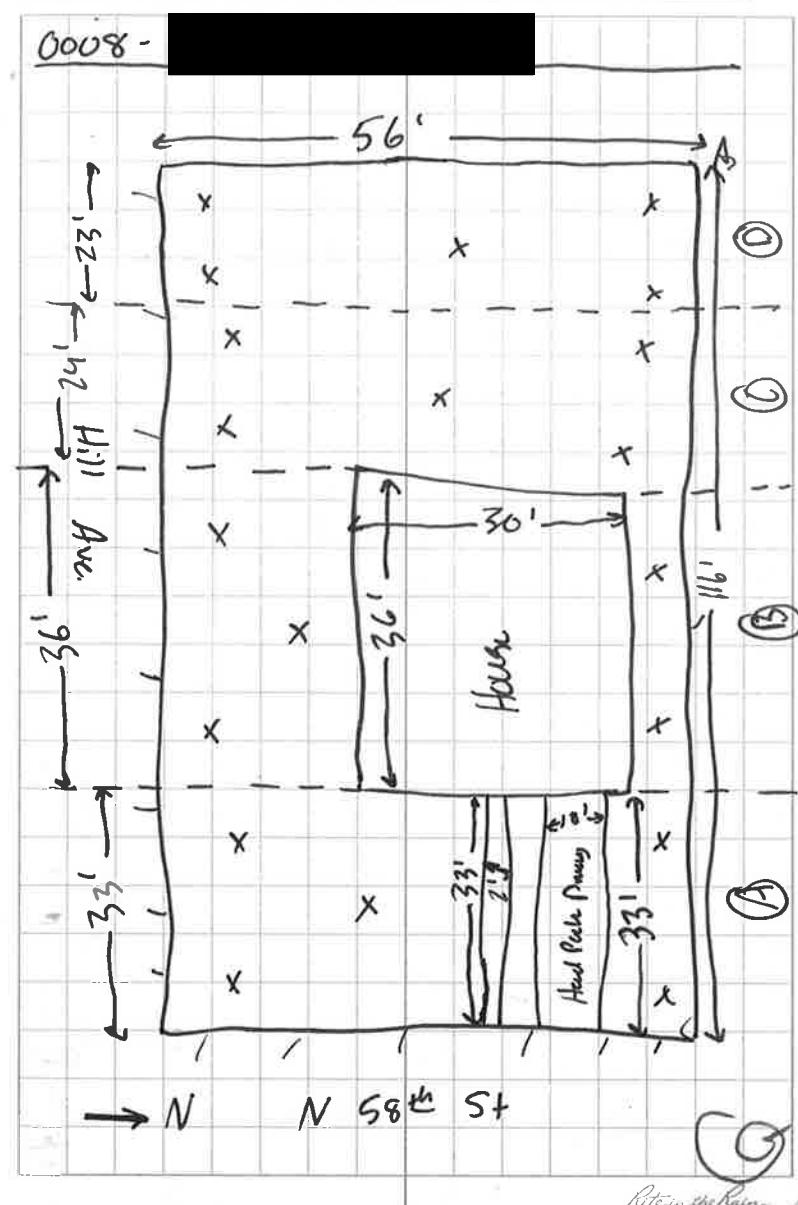
Location East St. Louis

Date

9/13/19

Project / Client OAZ/EPA

0008-



Rite in the Rain

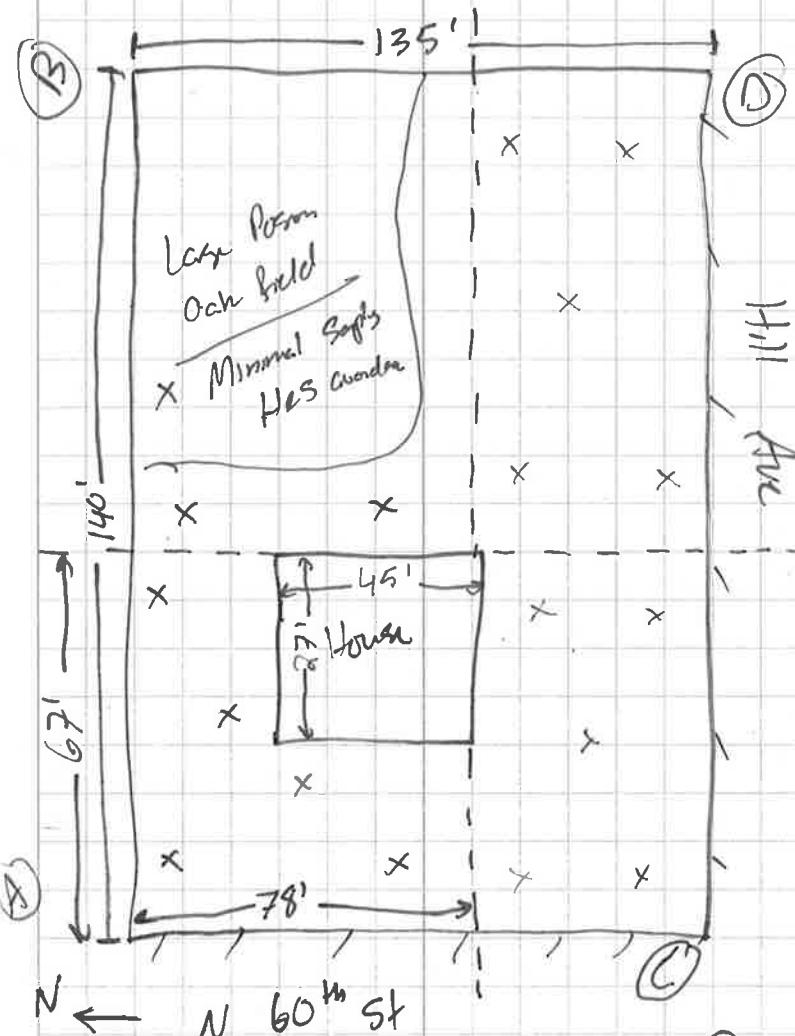
Large poison oak field / yard behind house,  
minimal sampling performed here. This yard  
will be quadrants due to fencing.

- 0940 - OAZ-0011A-00106 collected
- 0945 - OAZ-0011A-06112 collected
- 0956 - OAZ-0011A-12/18 collected
- 0955 - OAZ-0011A-18/24 collected (part)
- 0958 - OAZ-0011A-18/24R collected ↙
- 1000 - OAZ-0011B-06/06 collected
- 1005 - OAZ-0011B-06/12 collected
- 1010 - OAZ-0011B-12/18 collected
- 1015 - OAZ-0011B-18/24 collected
- 1020 - OAZ-0011C-00/06 collected
- 1025 - OAZ-0011C-06/12 collected
- 1030 - OAZ-0011C-12/18 collected
- 1035 - OAZ-0011C-18/24 collected
- 1038 - OAZ-0011D-00/06 collected
- 1041 - OAZ-0011D-06/12 collected
- 1044 - OAZ-0011D-12/18 collected (part)
- 1047 - OAZ-0011D-12/18R collected ↗
- 1044 - OAZ-0011D-12/18 MS/MSD collected
- ~~1047~~ OAZ-0011D-18/24 collected

1050 Excess soil returned to original sample holes.

Photos taken, flags pulled. Auger cleaned between yard  
areas and intervals per SOP. —————— 2009 ——————

0011 - [REDACTED]



HES in the chain

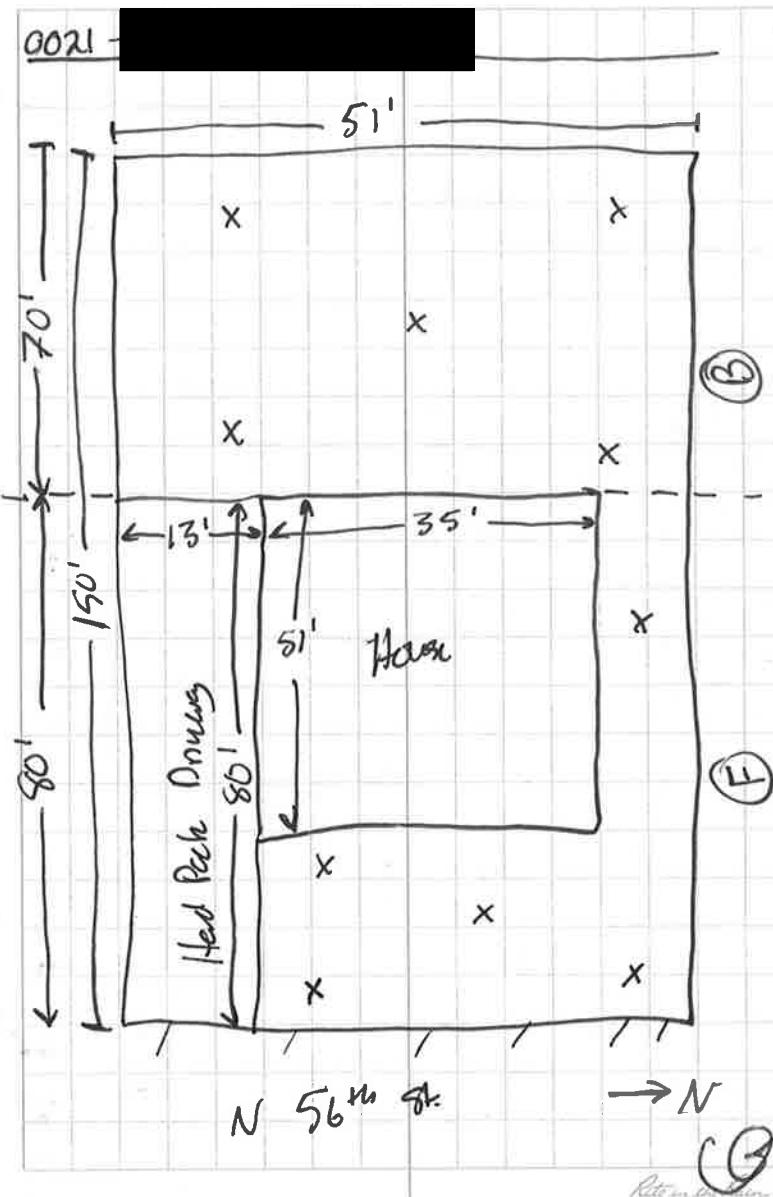
7650 ft<sup>2</sup> lot area - 1785 ft<sup>2</sup> house - 1040 ft<sup>2</sup>  
hard pack driveway  $\Rightarrow$  ~14825 ft<sup>2</sup> sample area  $\Rightarrow$  F/B

- 1100 - OAZ-0021F-00106 collected
- 1103 - OAZ-0021F-06112 collected
- 1106 - OAZ-0021F-12118 collected
- 1109 - OAZ-0021F-18124 collected
- 1112 - OAZ-0021B-00106 collected
- 1115 - OAZ-0021B-06112 collected
- 1118 - OAZ-0021B-12118 collected
- 1121 - OAZ-0021B-18124 collected

Slag throughout all intervals in F and B  
sections. Large rotting trees on property.  
Excess soil returned to aliquot sample holes.  
Photos taken, flags pulled.

Auger cleaned between yard intervals  
and areas per FOP.



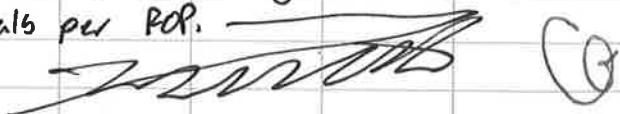


- 1340 - OAZ-0072A-00106 collected (penet)
- 1343 - OAZ-0072A-00106R collected
- 1345 - OAZ-0072A-06/12 collected
- 1350 - OAZ-0072A-12/18 collected
- 1355 - OAZ-0072A-18/24 collected
- 1406 - OAZ-0072B-00106 collected
- 1405 - OAZ-0072B-06/12 collected
- 1410 - OAZ-0072B-12/18 collected
- 1415 - OAZ-0072B-18/24 collected
- 1418 - OAZ-0072C-00106 collected
- 1421 - OAZ-0072C-06/12 collected
- 1424 - OAZ-0072C-12/18 collected
- 1427 - OAZ-0072C-18/24 collected (penet)
- 1430 - OAZ-0072C-18/24R collected
- 1433 - OAZ-0072C-18/24 M5/M5D collected
- 1435 - OAZ-0072D-00106 collected
- 1440 - OAZ-0072D-06/12 collected
- 1445 - OAZ-0072D-12/18 collected
- 1450 - OAZ-0072D-18/24 collected

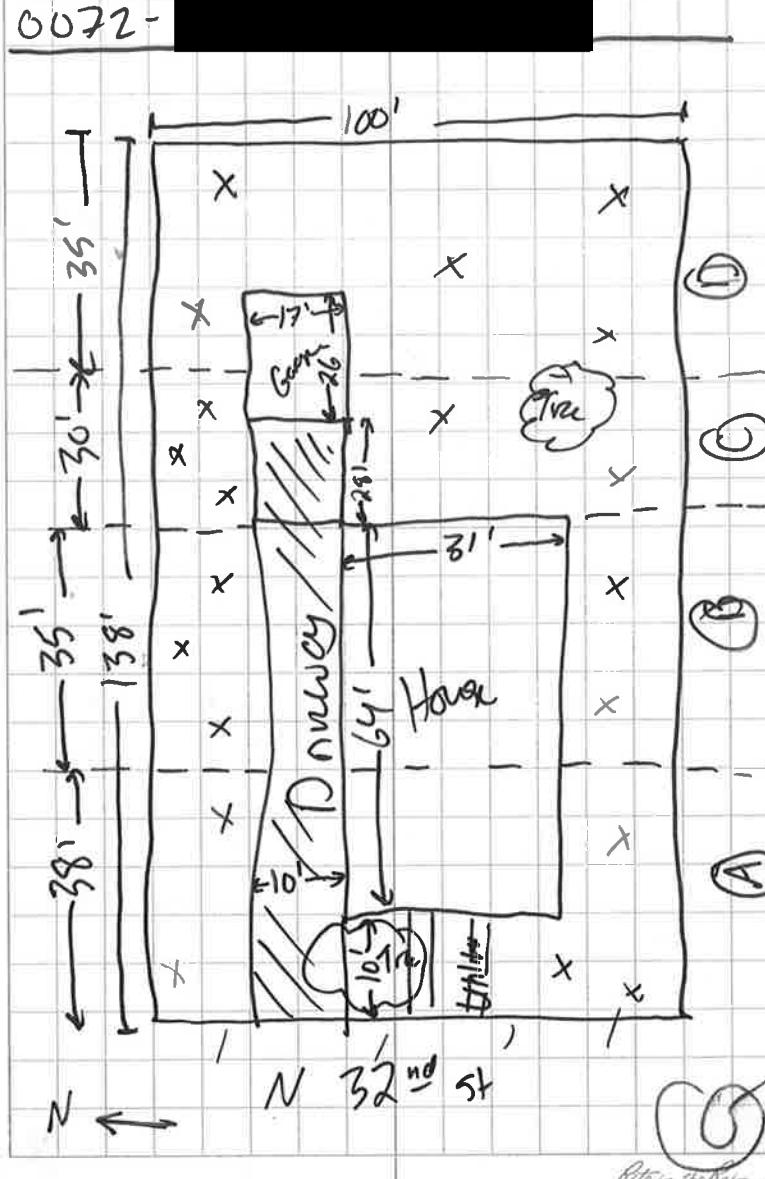
Excess soil returned to aliquot sample holes.

Photos taken, flags pulled.

Auger cleaned between yard areas and intervals per ROP.



0072-



6016 ft<sup>2</sup> lot - 1650 ft<sup>2</sup> house  $\Rightarrow$  F/B

Side yard is >10ft, will be incorporated into the "F" section.

- 1530 - OAZ-1055/R1001F-00/06 collected
- 1535 - OAZ-1055/R1001F-06/12 collected
- 1540 - OAZ-1055/R1001F-12/18 collected
- 1543 - OAZ-1055/R1001F-18/24 collected
- 1546 - OAZ-1055/R1001B-00/06 collected
- +5919A - OAZ-1055/R1001B-06/12 collected (part)
- 1552 - OAZ-1055/R1001B-06/12R collected
- 1555 - OAZ-1055/R1001B-12/18 collected
- 1558 - OAZ-1055/R1001B-18/24 collected

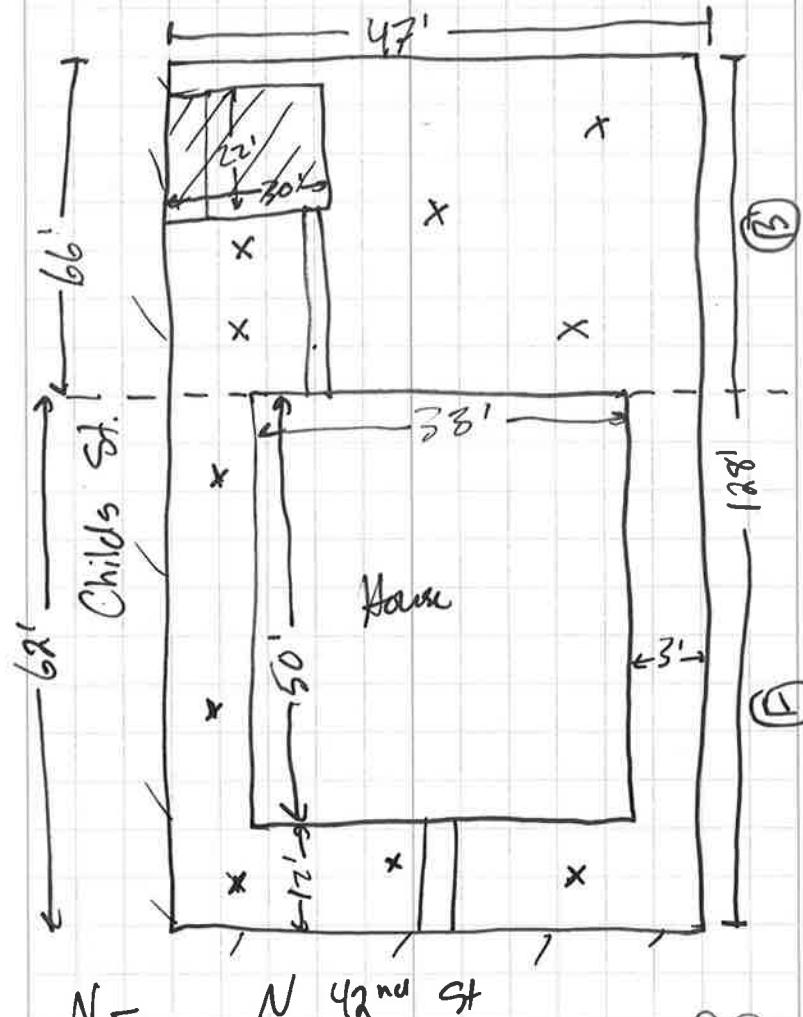
Excess soil returned to aliquot sample holes.

Photos taken, flags pulled.

Auger cleaned between intervals and yard areas per FOB.



1055/R1001 - [REDACTED]



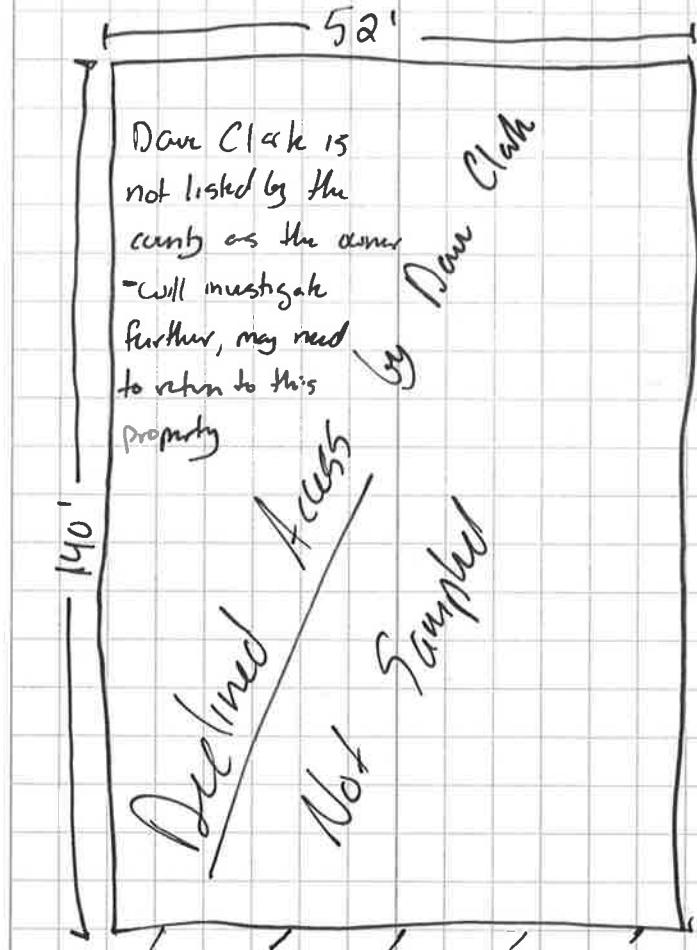
0845- Speaking to home owner, verbally declined. Access agreement signed to Decline sampling by Dave Clark.

- Will not return to this property and ensure resident's decision is honored

*Initials*

*Q*

0083-1



*G*

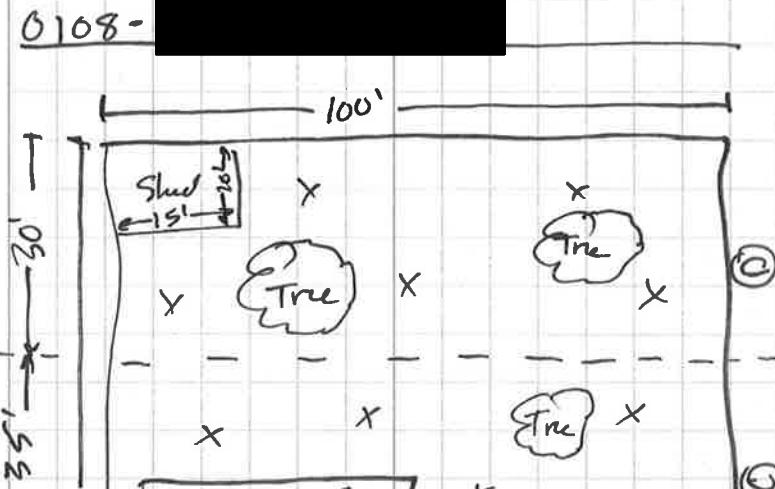
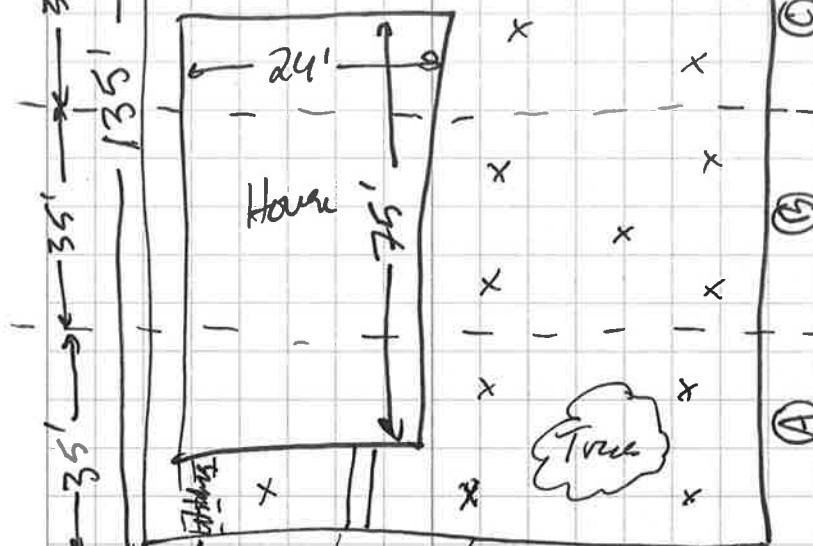
0856 - OAZ-0108A-00/06 collected  
 0900 - OAZ-0108A-06/12 collected  
 0905 - OAZ-0108A-12/18 collected  
 0910 - OAZ-0108A-18/24 collected  
 0915 - OAZ-0108B-00/06 collected  
 0920 - OAZ-0108B-06/12 collected  
 0925 - OAZ-0108B-12/18 collected  
 0930 - OAZ-0108B-18/24 collected  
 0935 - OAZ-0108C-00/06  
 0940 - OAZ-0108C-06/12 collected  
 0945 - OAZ-0108C-12/18 collected  
 0950 - OAZ-0108C-18/24 collected  
 0955 - OAZ-0108D-00/06 collected  
 1000 - OAZ-0108D-06/12 collected  
 1005 - OAZ-0108D-12/18 collected  
 1010 - OAZ-0108D-18/24 collected

Excess soil returned to aliquot sample holes.

Photos taken, flags pulled.

Auger cleaned between intervals and grid areas

0108-

N ← N 32<sup>nd</sup> St.

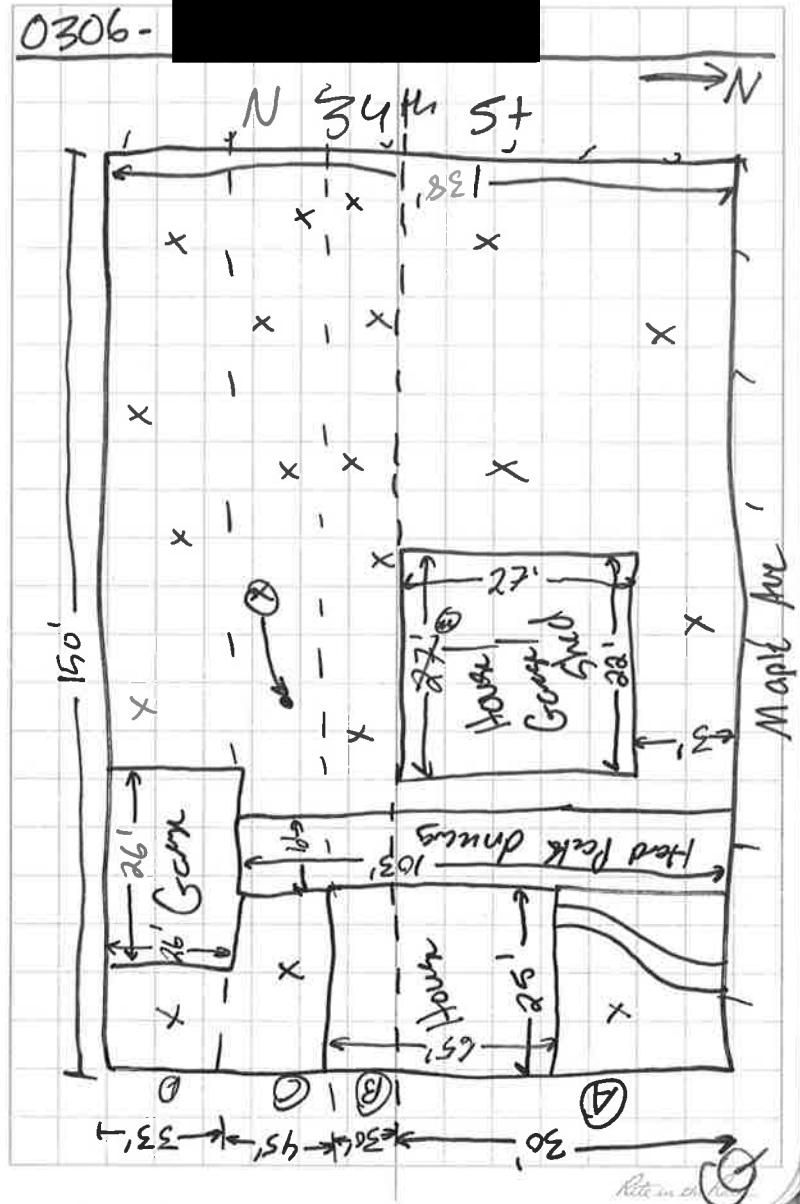
Rite in motion

- 1030 - OAZ-0306A-00/06 collected  
 1035 - OAZ-0306A-06/12 collected  
 1040 - OAZ-0306A-12/18 collected point  
 1045 - OAZ-0306A-12/18 R collected  
 1050 - OAZ-0306A-18/24 collected  
 1055 - OAZ-0306B-00/06 collected  
 1100 - OAZ-0306B-06/12 collected  
 1105 - OAZ-0306B-12/18 collected  
 1110 - OAZ-0306B-18/24 collected  
 1115 - OAZ-0306C-00/06 collected  
 1120 - OAZ-0306C-06/12 collected  
 1125 - OAZ-0306C-12/18 collected  
 1130 - OAZ-0306C-18/24 collected  
 1135 - OAZ-0306D-00/06 collected  
 1140 - OAZ-0306D-06/12 collected point  
 1143 - OAZ-0306D-06/12 R collected  
 1140 - OAZ-0306D-06/12 M5/M5D collected  
 1143 - OAZ-0306D-12/18 collected  
 1146 - OAZ-0306D-18/24 collected

Excess Soil returned to aliquot sample holes.  
Photos taken, flags pulled.

Sugars cleaned between intervals and  
yard areas per FOP.

0306-



134

Location East St. Louis  
Project / Client OAZ/EPA

Date 9/14/19

Extensive slag throughout [REDACTED]

~~OAZ-00~~ (W)

- 1320 - OAZ-0565F-00/06 collected  
 1323 - OAZ-0565F-06/12 collected  
 1326 - OAZ-0565F-12/18 collected  
 1329 - OAZ-0565F-18/24 collected  
 1332 - OAZ-0565M-00/06 collected  
 1335 - OAZ-0565M-06/12 collected  
 1338 - OAZ-0565M-12/18 collected  
 1341 - OAZ-0565M-18/24 collected point)  
 1344 - OAZ-0565M-18/24R collected e  
 1347 - OAZ-0565B-00/06 collected  
 1350 - OAZ-0565B-06/12 collected  
 1355 - OAZ-0565B-12/18 collected  
 1358 - OAZ-0565B-18/24 collected

Excess soil returned to aligned sample holes.

Photos taken, flags pulled.

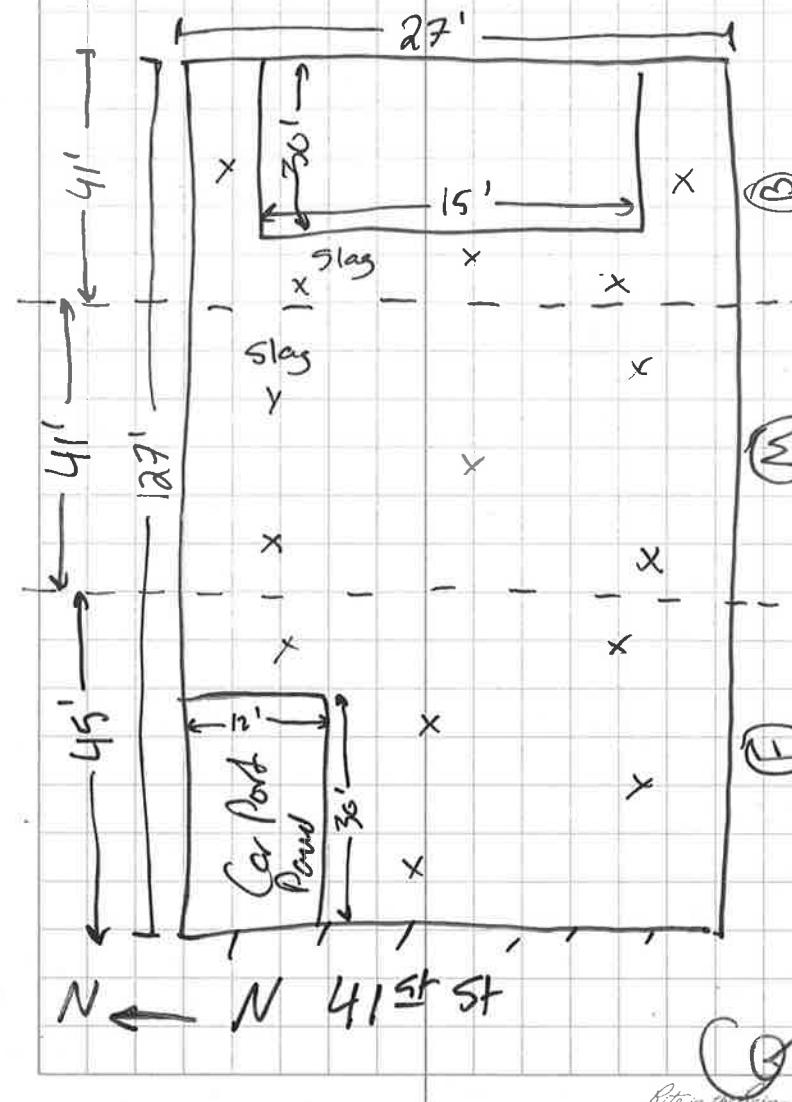
Auger cleaned between intervals and  
yard cans per FOP.

CG

Location East St. Louis  
Project / Client OAZ/EPA

Date 9/14/19

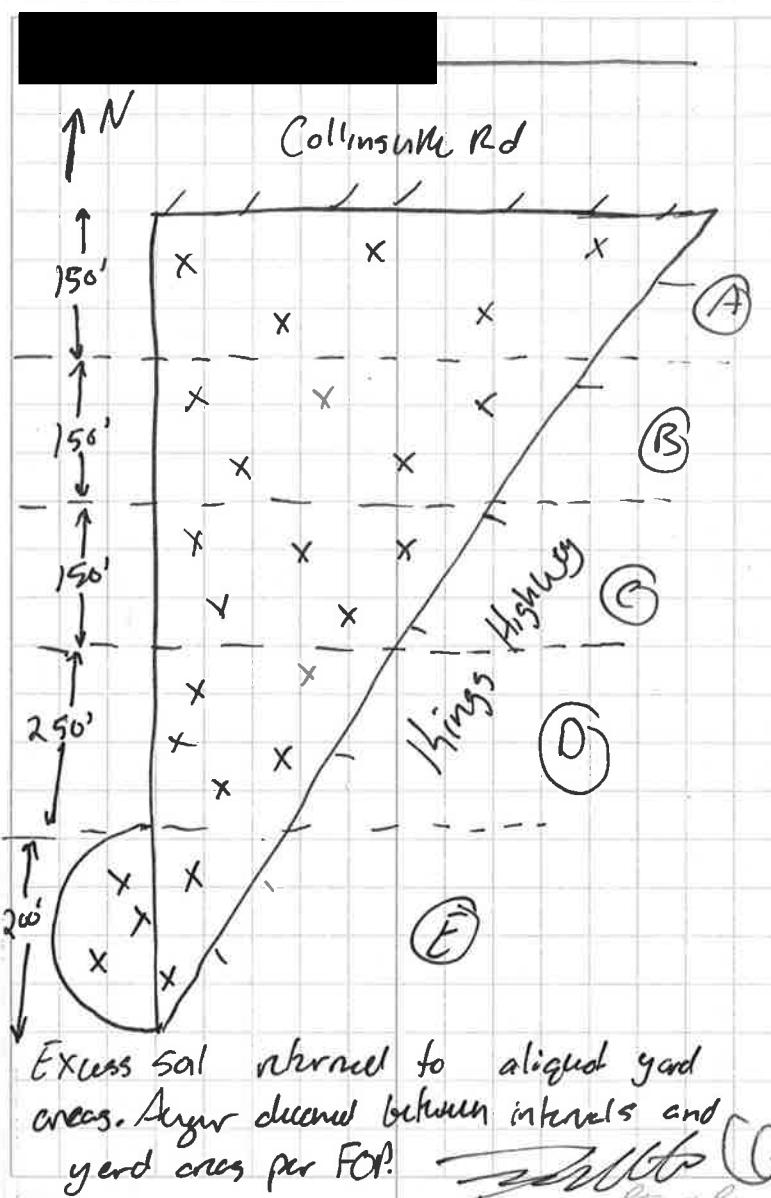
0565 - [REDACTED]



Rite in the Rain

1440 - OAZ-0915A-00106 Collected  
 1445 - OAZ-0915A-06112 Collected  
 1450 - OAZ-0915A-12118 Collected  
 1455 - OAZ-0915A-18124 Collected  
 1500 - OAZ-0915B-06106 Collected  
 1505 - OAZ-0915B-06112 Collected  
 1510 - OAZ-0915B-12118 Collected (part)  
 1515 - OAZ-0915B-12118R Collected (part)  
 1510 - OAZ-0915B-12118 MS/MSD Collected  
 1513 - OAZ-0915B-18124 Collected  
~~1515~~ 1517 - OAZ-0915C-00106 Collected at 1517  
 1520 - OAZ-0915C-06112 Collected  
 1525 - OAZ-0915C-12118 Collected  
 1530 - OAZ-0915C-18124 Collected  
 1535 - OAZ-0915D-00106 Collected  
 1540 - OAZ-0915D-06112 Collected  
 1545 - OAZ-0915D-12118 Collected  
 1550 - OAZ-0915D-18124 Collected  
 1555 - OAZ-0915E-00106 Collected (part)  
 1600 - OAZ-0915E-06106B Collected  
 1605 - OAZ-0915E-06112 Collected  
 1610 - OAZ-0915E-12118 Collected  
 1615 - OAZ-0915E-18124 Collected

Photos taken, flags pulled.



Aerial Photo is old - derelict house.

This is a vacant lot, which is located by Julie.

- 0835 - OAZ-1054A-00/06 collected
- 0840 - OAZ-1054A-06/12 collected
- 0845 - OAZ-1054A-12/18 collected
- 0850 - OAZ-1054A-18/24 collected
- 0855 - OAZ-1054B-00/06 collected
- 0900 - OAZ-1054B-06/12 collected
- 0905 - OAZ-1054B-12/18 collected
- 0910 - OAZ-1054B-18/24 collected point ↗
- 0913 - OAZ-1054B-18/24R collected ↙
- 0910 - OAZ-1054B-18/24MS/MSD collected
- 0915 - OAZ-1054C-00/06 collected
- 0920 - OAZ-1054C-06/12 collected
- 0925 - OAZ-1054C-12/18 collected
- 0930 - OAZ-1054C-18/24 collected
- 0935 - OAZ-1054D-00/06 collected
- 0940 - OAZ-1054D-06/12 collected
- 0945 - OAZ-1054D-12/18 collected
- 0950 - OAZ-1054D-18/24 collected

Excess soil returned to aliquot sample holes.  
Photos taken, flags pulled.

Auger cleaned between intervals and yard  
areas per POP.

1054 -

↓ N Maple Ave

Rita [signature]

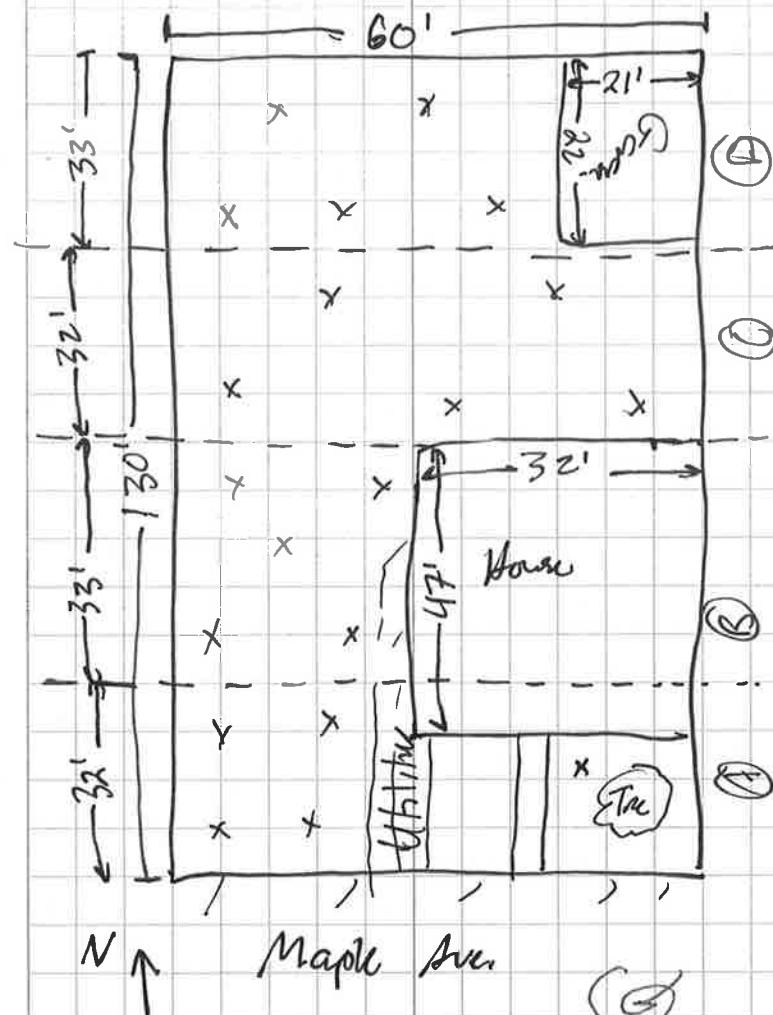
- 1006 - OAZ-0313A-06/06 collected  
 1005 - OAZ-0313A-06/12 collected (perm)  
 1008 - OAZ-0313A-06/12R collected  
 1016 - OAZ-0313A-12/18 collected  
 1015 - OAZ-0313A-18/24 collected  
 1020 - OAZ-0313B-06/06 collected  
 1025 - OAZ-0313B-06/12 collected  
 1030 - OAZ-0313B-12/18 collected  
 1035 - OAZ-0313B-18/24 collected  
 1040 - OAZ-0313C-06/06 collected  
 1045 - OAZ-0313C-06/12 collected  
 1050 - OAZ-0313C-12/18 collected  
 1055 - OAZ-0313C-18/24 collected  
 1106 - OAZ-0313D-06/06 (collected perm)  
 1103 - OAZ-0313D-06/06R collected  
 1100 - OAZ-0313D-06/06 MS/MSD collected  
 1105 - OAZ-0313D-06/12 collected  
 1110 - OAZ-0313D-12/18 collected  
 1115 - OAZ-0313D-18/24 collected

Excess soil returned to aliquot sample holes. Photos taken, flags pulled.

Augers cleaned between intervals and yard areas per FOP.

*[Handwritten signatures]*

O313 - [REDACTED]



6426 ft<sup>2</sup> lot - 1700 ft<sup>2</sup> house - 1058 ft<sup>2</sup> garage/dorms  
 ⇒ F/B property > 5000 ft<sup>2</sup>

- 1330 - OAZ-0331F-00106 collected  
 1335 - OAZ-0331F-06112 collected  
 1340 - OAZ-0331F-12118 collected  
 1345 - OAZ-0331F-19124 collected  
 1350 - OAZ-0313B-00106 collected  
 1355 - OAZ-0313B-06112 collected  
 1400 - OAZ-0313B-12118 (collected parallel)  
 1403 - OAZ-0313B-12118R collected  
 1405 - OAZ-0313B-18124 collected

Auger cleaned between intervals and yard  
 ones per FOP.

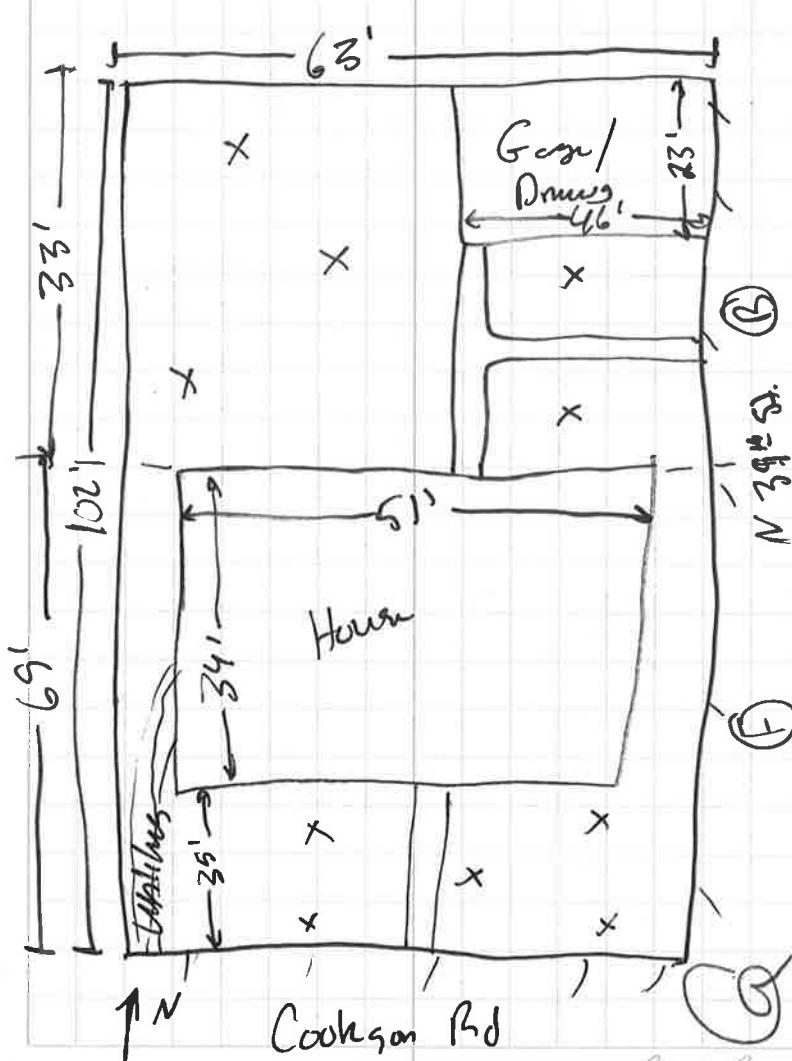
Photos taken, flags pulled.

Excess soil returned to aliquot sample  
 holes.

*MWAB*

*CG*

0331-



Alt in inches

8250 ft<sup>2</sup> lot - 2610 ft<sup>2</sup> house - 1235 ft<sup>2</sup> driveway  
 - 689 ft<sup>2</sup> garage/other ~~chicken coop~~  $\Rightarrow$  3716 ft<sup>2</sup> footprint  
 $\Rightarrow$  F/B property, Spanish only residents

1566 - OAZ-0261F-06/06 collected

1505 - OAZ-0261F-06/12 collected

1510 - OAZ-0261F-12/18 collected

1515 - OAZ-0261F-18/24 collected

1520 - OAZ-0261B-06/06 collected

1525 - OAZ-0261B-06/12 collected

1530 - OAZ-0261B-12/18 collected

1535 - OAZ-0261B-18/24 collected

Excess soil returned to adjacent yard areas.

Photos taken, flags pulled,

Augers cleared between intervals and yard areas per POP.



G

Oaz1 -

